



**November 2022** 

This is a maternal and child health surveillance report focused on births to WIC recipients for the three-year period from 2018-2020. This report is based on the MCH Annual reports but excludes teen pregnancy since we do not have WIC specific data for that indicator. Included are WIC birth data for three-year periods reported by district and county for low birth weight, preterm delivery, pre-pregnancy BMI and weight gain during pregnancy, entry into prenatal care, adequacy of prenatal care utilization, smoking before pregnancy, quit rates for smokers during pregnancy, and new families at risk. Following the highlights is a series of charts showing recent WIC data by county and district for each indicator, and a long-term trend plot comparing WIC and non-WIC data. The charts will be followed by detailed tables for each indicator for the most recent three years by district, and lastly the same tables by county.

If you have any questions or comments, please e-mail Michael.Nyland-Funke@vermont.gov.

### **Highlights**

- The low birth weight (<2500g) rate for WIC births from 2018-2020 was 9.3%. No district had a WIC low birthweight rate significantly higher or lower than the state WIC rate for this period.
- The very low birthweight (<1500g) rate was 1.2% for WIC births from 2018-2020.
- The low birthweight rate for singleton births was 7.5% for WIC births during this three-year period. The St. Albans district had a significantly lower rate than the state for WIC births.
- The preterm delivery rate (<37 weeks gestation) was 9.0% among WIC births for 2018-2020.
- Among women on WIC who gave birth from 2018-2020, 34.4% had a healthy prepregnancy body-mass index (BMI). During this three-year period, 3.7% of WIC women giving birth were underweight pre-pregnancy, while 23.4% were overweight and 38.5% were obese (BMI > 30). The Burlington district had a significantly higher percentage of healthy weight mothers among WIC clients than the state. The St. Johnsbury district had a significantly higher percentage of overweight mothers, and the St. Albans district had a higher percentage of obese mothers than the state WIC population.
- From 2018-2020, 27.0% of women on WIC achieved the recommended amount of weight gain during pregnancy, while 25.5% gained less weight than recommended and 47.5% gained more than the recommended amount. Women in the Burlington district were more likely to gain less than the recommended amount, while women in the St. Johnsbury district were more likely to gain more than the recommended amount.

[BMI categories and weight gain recommendations defined by the Institute of Medicine. See bottom of page 2 for details.]

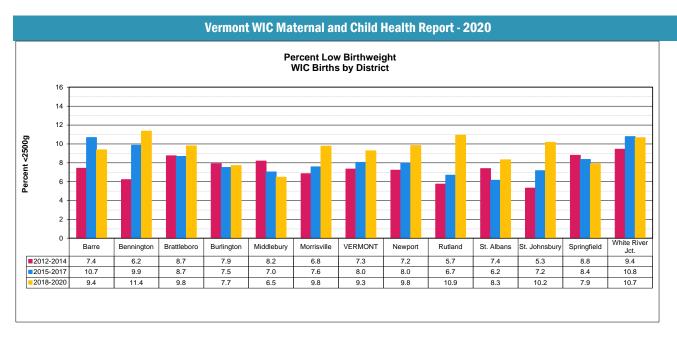
- The rate for first trimester prenatal care entry was 80.7% among WIC mothers from 2018-2020. The Newport, White River Jct., St. Albans and Middlebury districts all had first trimester prenatal care entry rates significantly higher than the state rate for WIC mothers. The Burlington district had a significantly lower rate of first trimester care.
- The percent of women with adequate or intensive prenatal care utilization (as defined by the Kotelchuck Index) among WIC mothers was 84.4% for this three-year period. The Rutland and Middlebury districts had a significantly higher rate of at least adequate prenatal care utilization, while the Springfield district was significantly lower than the state rate for WIC mothers.
- From 2018-2020, 31.3% of WIC births were to women who smoked before pregnancy. There was wide variation in smoking rates among WIC mothers by district, ranging from a low of 20.3% in the Burlington district, to a high of 37.8% in the Barre district.
- Of the women who smoked before pregnancy or during the first trimester from 2018-2020, 24.6% quit smoking for the second and third trimester. Quit rates also varied widely by district, from a low of 17.4% in Morrisville to a high of 29.8% in St. Johnsbury.
- New families at risk, defined as first births to single mothers aged less than 20 years with less than a high school education, accounted for 8.8% of first births to WIC mothers for 2018-2020. The Burlington, Middlebury and White River Jct. districts had significantly lower percentage of new families at risk than the overall state WIC population, while Barre had a significantly higher percentage.

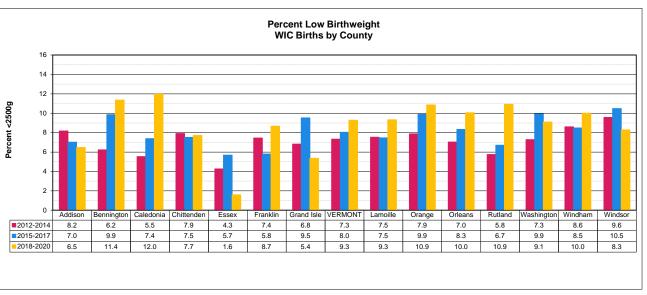
### Institute of Medicine Recommendations for Weight Gain During Pregnancy by Pre-Pregnancy BMI

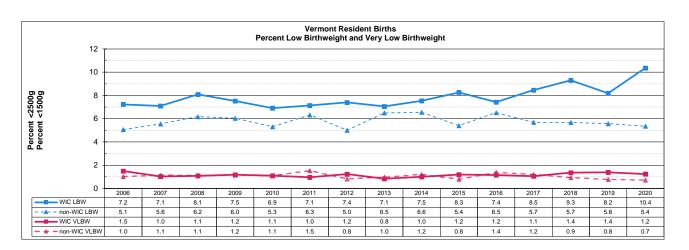
		Weight Gain Red	commendation
	вмі	Single	Twin
Pre-pregnancy BMI	(kg/m2)	Gestation	Gestation
Underweight	<18.5	28-40lbs	
Normal weight	18.5-24.9	25–35lbs	37–54lbs
Overweight	25.0-29.9	15–25lbs	31–50lbs
Obese	≥30.0	11–20lbs	25–42lbs

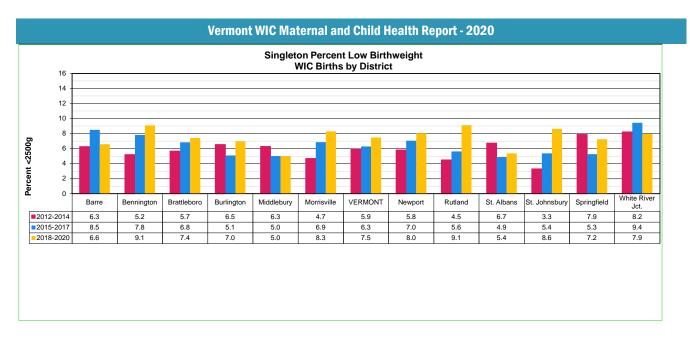
There are no standard recommendations for underweight women carrying twins, or for higher order multiple gestations.

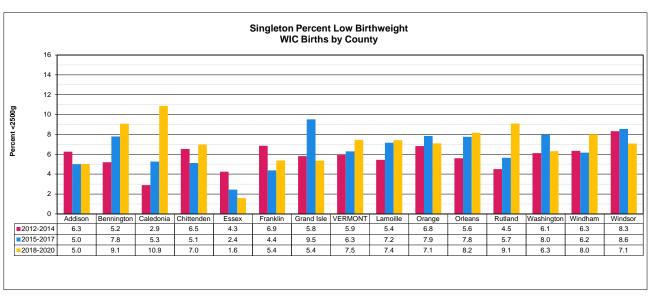
Details on the IOM guidelines for weight gain can be found here: http://iom.edu/About-IOM/Leadership-Staff/Boards/Food-and-Nutrition-Board/HealthyPregnancy.aspx

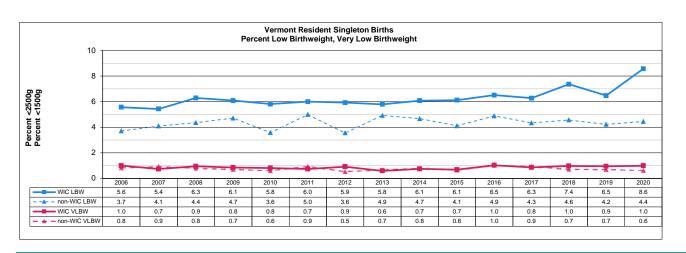


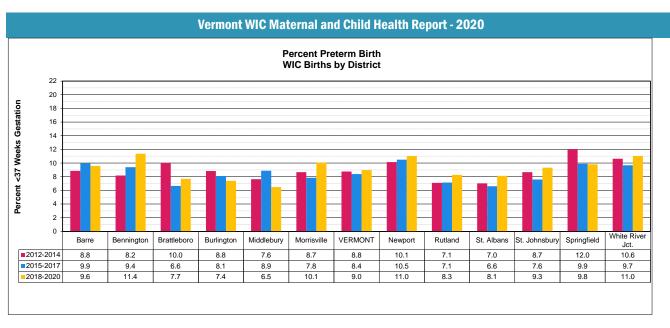


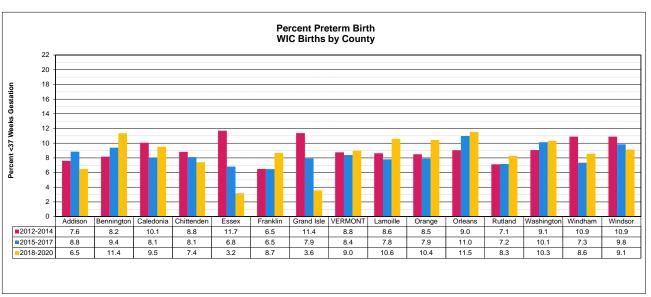


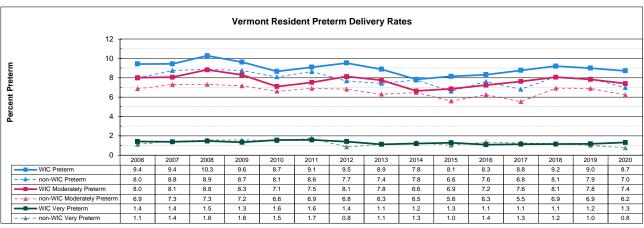








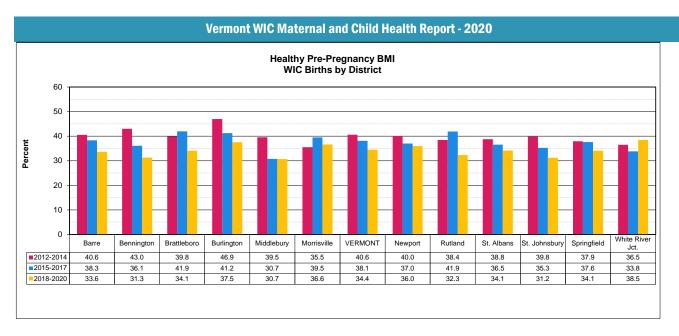


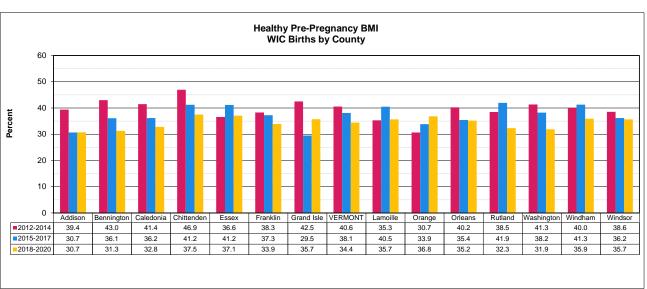


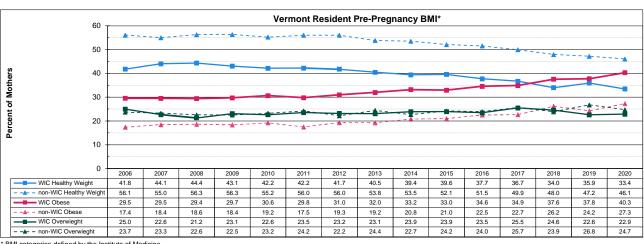
Preterm = <37 weeks gestation

Moderately Preterm = 32-36 weeks gestation

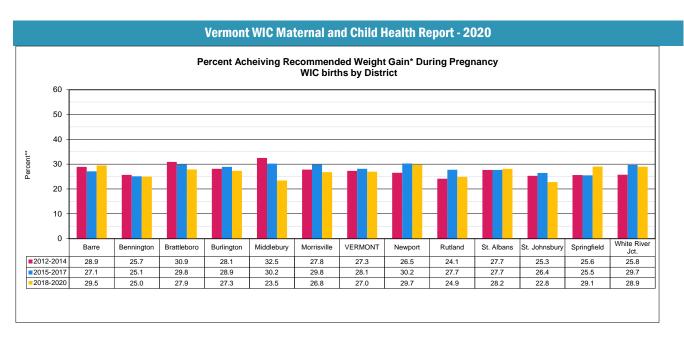
Very Preterm = <32 weeks gestation

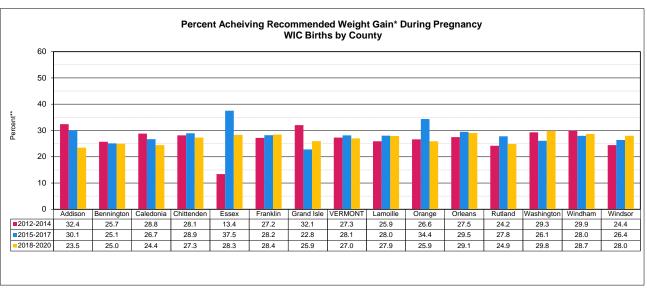


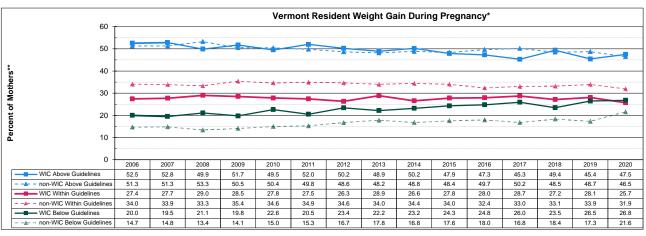




<sup>\*</sup> BMI categories defined by the Institute of Medicine.

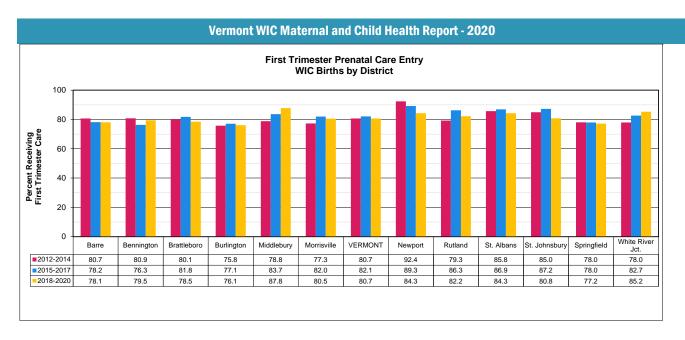


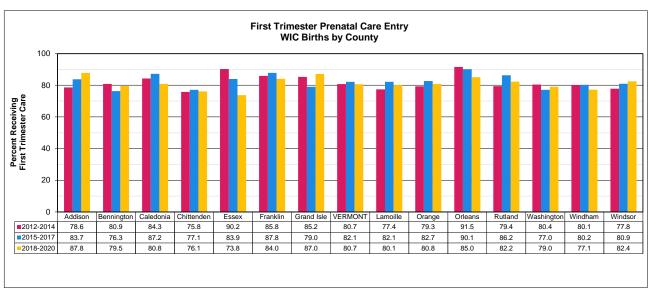


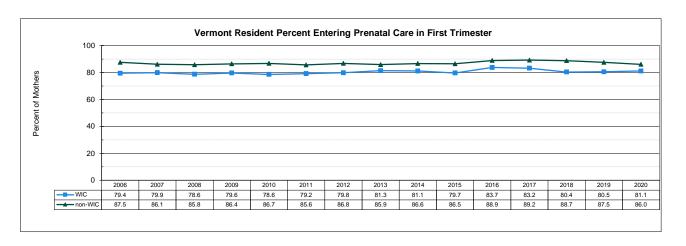


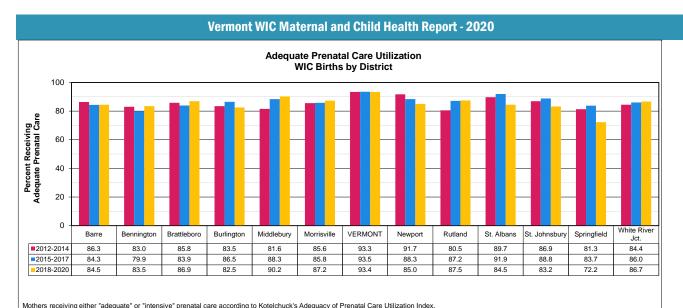
<sup>\*</sup> Weight gain recommendations defined by the Institute of Medicine.

<sup>\*\*</sup> Only includes women who delivered full-term singleton or twin births.

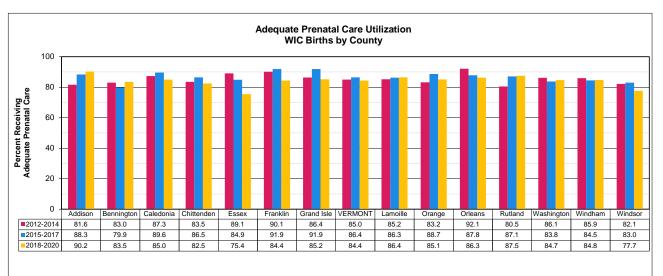




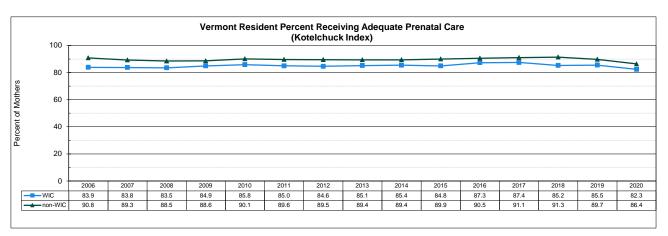




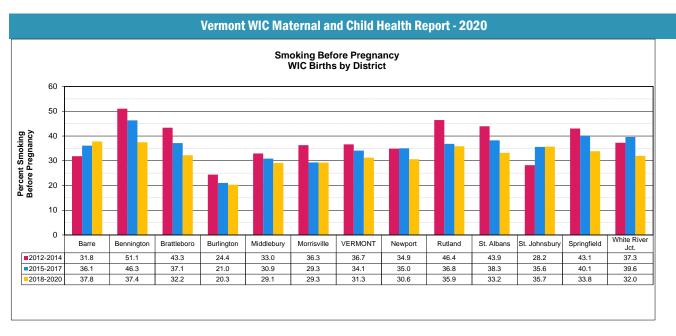


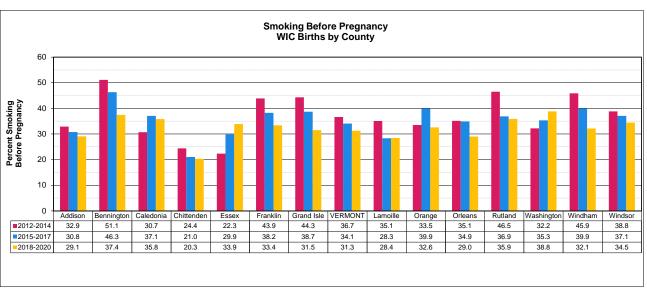


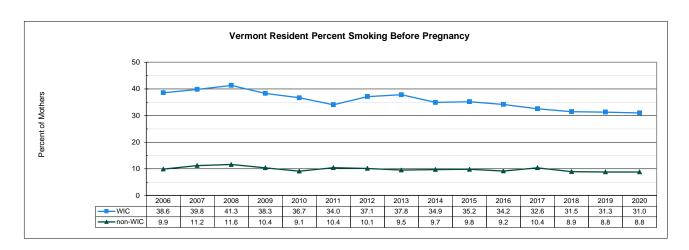
Mothers receiving either "adequate" or "intensive" prenatal care according to Kotelchuck's Adequacy of Prenatal Care Utilization Index.



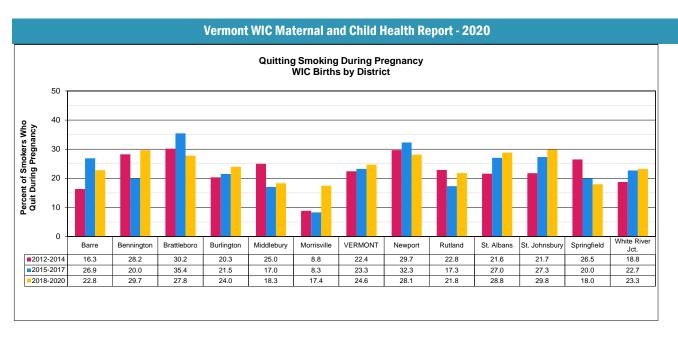
Mothers receiving either "adequate" or "intensive" prenatal care according to Kotelchuck's Adequacy of Prenatal Care Utilization Index.

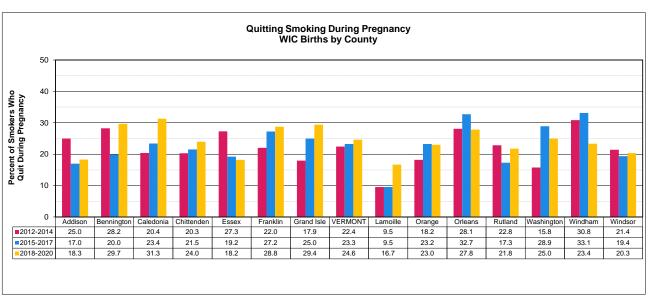


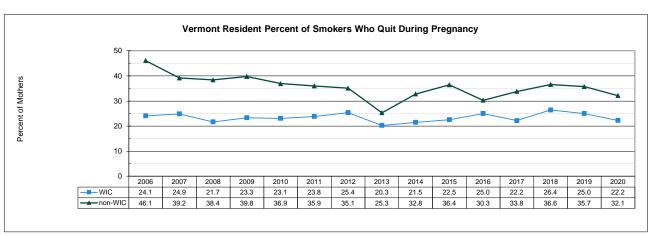




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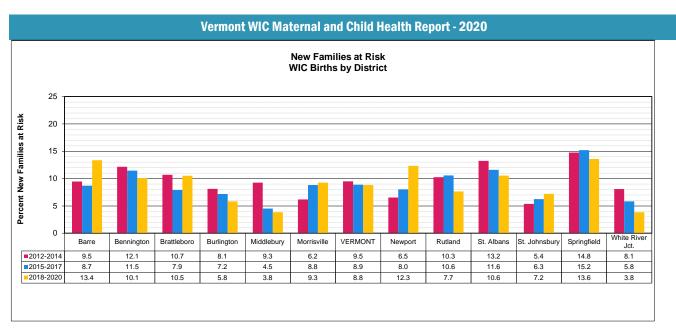


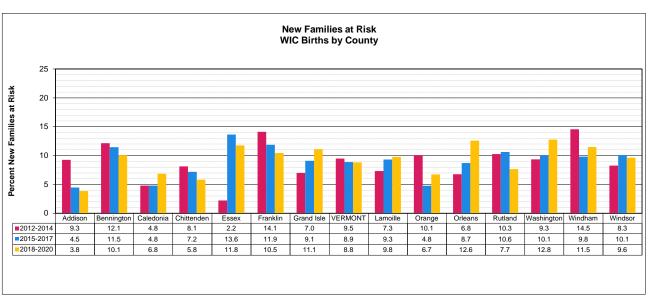


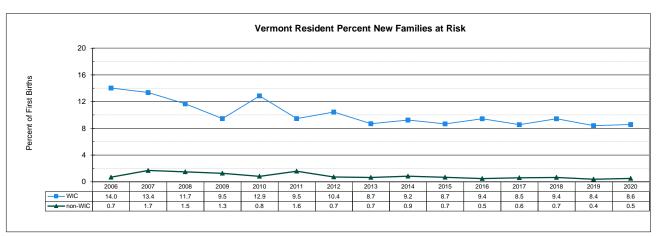


Women were counted as smokers if they smoked before pregnancy or during the first trimester of pregnancy.

Women were counted as having quit smoking if they did not smoke in the second and third trimesters of pregnancy, after smoking either before pregnancy or during the first trimester.







Percent New Families at Risk is defined as the percentage of resident first births occurring to unmarried women under 20 years of age with less than a high school education.

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

# BIRTHWEIGHT IN GRAMS BY DISTRICT NUMBER OF EVENTS AND ROW PERCENTS

#### BIRTHWEIGHT

#### NUMBER OF EVENTS

DISTRICT	<500g	500- 999g	1000- 1499g	1500- 1999g	2000- 2499g	2500- 2999g	3000- 3499g	3500- 3999g	4000- 4499g	4500- 4999g	5000- 5499g	_	UNKNOWN	TOTAL
BARRE	0	2	3	7	31	98	162	117	35	3	1	0	0	459
BENNINGTON	0	3	5	9	29	72	153	104	27	2	1	0	0	405
BRATTLEBORO	0	2	4	4	18	51	94	73	35	5	0	0	0	286
BURLINGTON	2	1	4	13	53	224	335	222	81	10	2	0	0	947
MIDDLEBURY	0	0	1	1	14	44	102	62	23	0	0	0	0	247
MORRISVILLE	0	1	4	6	18	47	133	61	24	3	0	0	1	298
NEWPORT	1	1	3	13	24	79	171	104	26	4	0	1	0	427
RUTLAND	0	3	5	10	44	109	205	146	40	4	1	0	1	568
ST. ALBANS	0	1	3	6	34	94	197	126	59	7	2	0	1	530
ST. JOHNSBURY	0	0	3	8	25	62	131	84	39	1	1	0	0	354
SPRINGFIELD	0	0	6	4	11	57	101	67	18	2	0	0	0	266
WHITE RIVER JCT	0	2	2	5	20	56	99	69	15	4	0	0	0	272
TOTAL	3	16	43	86	321	993	1883	1235	422	45	8	1	3	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

DISTRICT	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
BARRE	0.0	0.4	1.1	2.6	9.4	30.7	66.0	91.5	99.1	99.8	100.0	100.0
BENNINGTON	0.0	0.7	2.0	4.2	11.4	29.1	66.9	92.6	99.3	99.8	100.0	100.0
BRATTLEBORO	0.0	0.7	2.1	3.5	9.8	27.6	60.5	86.0	98.3	100.0	100.0	100.0
BURLINGTON	0.2	0.3	0.7	2.1	7.7	31.4	66.7	90.2	98.7	99.8	100.0	100.0
MIDDLEBURY	0.0	0.0	0.4	0.8	6.5	24.3	65.6	90.7	100.0	100.0	100.0	100.0
MORRISVILLE	0.0	0.3	1.7	3.7	9.8	25.6	70.4	90.9	99.0	100.0	100.0	100.0
NEWPORT	0.2	0.5	1.2	4.2	9.8	28.3	68.4	92.7	98.8	99.8	99.8	100.0
RUTLAND	0.0	0.5	1.4	3.2	10.9	30.2	66.3	92.1	99.1	99.8	100.0	100.0
ST. ALBANS	0.0	0.2	0.8	1.9	8.3	26.1	63.3	87.1	98.3	99.6	100.0	100.0
ST. JOHNSBURY	0.0	0.0	0.8	3.1	10.2	27.7	64.7	88.4	99.4	99.7	100.0	100.0
SPRINGFIELD	0.0	0.0	2.3	3.8	7.9	29.3	67.3	92.5	99.2	100.0	100.0	100.0
WHITE RIVER JCT	0.0	0.7	1.5	3.3	10.7	31.3	67.6	93.0	98.5	100.0	100.0	100.0
TOTAL	0.1	0.4	1.2	2.9	9.3	28.9	66.2	90.6	98.9	99.8	100.0	100.0

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

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November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### SINGLETON BIRTHWEIGHT IN GRAMS BY DISTRICT NUMBER OF EVENTS AND ROW PERCENTS

#### BIRTHWEIGHT

#### NUMBER OF EVENTS

DISTRICT	<500g	500- 999g	1000- 1499g	1500- 1999g	2000- 2499g	2500- 2999g	3000- 3499g	3500- 3999g	4000- 4499g	4500- 4999g	5000- 5499g		UNKNOWN	TOTAL
BARRE	0	2	0	2	25	95	161	116	35	3	1	0	0	440
BENNINGTON	0	3	0	7	25	66	151	103	27	2	1	0	0	385
BRATTLEBORO	0	2	2	2	14	45	93	72	35	5	0	0	0	270
BURLINGTON	2	1	3	10	49	221	333	221	81	10	2	0	0	933
MIDDLEBURY	0	0	1	1	10	40	102	62	23	0	0	0	0	239
MORRISVILLE	0	1	2	5	16	45	133	61	24	3	0	0	1	291
NEWPORT	1	0	2	9	21	74	169	104	26	4	0	1	0	411
RUTLAND	0	3	3	8	36	103	205	146	40	4	1	0	1	550
ST. ALBANS	0	1	2	1	23	85	196	126	59	7	2	0	1	503
ST. JOHNSBURY	0	0	3	4	23	62	131	84	39	1	1	0	0	348
SPRINGFIELD	0	0	6	2	11	56	101	67	18	2	0	0	0	263
WHITE RIVER JCT	0	2	2	3	13	47	98	68	15	4	0	0	0	252
TOTAL	3	15	26	54	266	939	1873	1230	422	45	8	1	3	4885

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

DISTRICT	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
BARRE	0.0	0.5	0.5	0.9	6.6	28.2	64.8	91.1	99.1	99.8	100.0	100.0
BENNINGTON	0.0	0.8	0.8	2.6	9.1	26.2	65.5	92.2	99.2	99.7	100.0	100.0
BRATTLEBORO	0.0	0.7	1.5	2.2	7.4	24.1	58.5	85.2	98.1	100.0	100.0	100.0
BURLINGTON	0.2	0.3	0.6	1.7	7.0	30.7	66.3	90.0	98.7	99.8	100.0	100.0
MIDDLEBURY	0.0	0.0	0.4	0.8	5.0	21.8	64.4	90.4	100.0	100.0	100.0	100.0
MORRISVILLE	0.0	0.3	1.0	2.8	8.3	23.8	69.7	90.7	99.0	100.0	100.0	100.0
NEWPORT	0.2	0.2	0.7	2.9	8.0	26.0	67.2	92.5	98.8	99.8	99.8	100.0
RUTLAND	0.0	0.5	1.1	2.6	9.1	27.9	65.2	91.8	99.1	99.8	100.0	100.0
ST. ALBANS	0.0	0.2	0.6	0.8	5.4 <b>-</b>	22.3	61.4	86.5	98.2	99.6	100.0	100.0
ST. JOHNSBURY	0.0	0.0	0.9	2.0	8.6	26.4	64.1	88.2	99.4	99.7	100.0	100.0
SPRINGFIELD	0.0	0.0	2.3 +	3.0	7.2	28.5	66.9	92.4	99.2	100.0	100.0	100.0
WHITE RIVER JCT	0.0	0.8	1.6	2.8	7.9	26.6	65.5	92.5	98.4	100.0	100.0	100.0
TOTAL	0.1	0.4	0.9	2.0	7.5	26.7	65.1	90.2	98.9	99.8	100.0	100.0

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

#### WEEKS GESTATION BY DISTRICT NUMBER OF EVENTS AND ROW PERCENTS

#### NUMBER OF EVENTS

DISTRICT	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks	Unknown Weeks	TOTAL
BARRE	1	1	3	39	121	292	2	0	459
BENNINGTON	4	4	3	35	94	264	1	0	405
BRATTLEBORO	0	7	1	14	76	186	2	0	286
BURLINGTON	2	2	6	60	244	625	7	1	947
MIDDLEBURY	0	1	2	13	72	158	1	0	247
MORRISVILLE	1	4	5	20	80	183	5	0	298
NEWPORT	1	6	8	32	117	262	0	1	427
RUTLAND	3	5	7	32	166	354	1	0	568
ST. ALBANS	0	3	11	29	103	383	0	1	530
ST. JOHNSBURY	0	5	5	23	81	237	3	0	354
SPRINGFIELD	2	4	7	13	65	174	0	1	266
WHITE RIVER JCT	1	4	3	22	72	168	2	0	272
TOTAL	15	46	61	332	1291	3286	24	4	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

		28-31	32-33	34-36	37-38	39-41	42+	
DISTRICT	<28 Weeks	Weeks	Weeks	Weeks	Weeks	Weeks	Weeks	
BARRE	0.2	0.4	1.1 -	9.6	35.9	99.6	100.0	
BENNINGTON	1.0	2.0	2.7	11.4	34.6	99.8	100.0	
BRATTLEBORO	0.0	2.4	2.8	7.7	34.3	99.3	100.0	
BURLINGTON	0.2	0.4	1.1 -	7.4	33.2	99.3	100.0	
MIDDLEBURY	0.0	0.4	1.2	6.5	35.6	99.6	100.0	
MORRISVILLE	0.3	1.7	3.4	10.1	36.9	98.3	100.0	
NEWPORT	0.2	1.6	3.5	11.0	38.5	100.0	100.0	
RUTLAND	0.5	1.4	2.6	8.3	37.5	99.8	100.0	
ST. ALBANS	0.0	0.6	2.6	8.1	27.6	100.0	100.0	
ST. JOHNSBURY	0.0	1.4	2.8	9.3	32.2	99.2	100.0	
SPRINGFIELD	0.8	2.3	4.9 <b>+</b>	9.8	34.3	100.0	100.0	
WHITE RIVER JCT	0.4	1.8	2.9	11.0	37.5	99.3	100.0	
TOTAL	0.3	1.2	2.4	9.0	34.5	99.5	100.0	

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

# PRE-PREGNANCY BMI and WEIGHT GAIN DURING PREGNANCY by DISTRICT NUMBER OF MOTHERS AND ROW PERCENTS

#### NUMBER OF EVENTS

PRE-PREGNANCY BMI UNDER- HEALTHY OVER-								WEIGHT GAI	N DURING PREGNA	ANCY*	
DISTRICT	UNDER- WEIGHT	HEALTHY WEIGHT	OVER- WEIGHT	OBESE	UNKNOWN	TOTAL	BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES	UNKNOWN	TOTAL
BARRE	18	150	98	180	3	449	94	121	195	3	413
BENNINGTON	11	122	92	165	5	395	89	88	175	5	357
BRATTLEBORO	12	93	64	104	5	278	65	70	116	5	256
BURLINGTON	34	344	226	313	23	940	255	231	361	23	870
MIDDLEBURY	12	74	55	100	2	243	62	53	111	2	228
MORRISVILLE	10	107	60	115	3	295	67	71	127	3	268
NEWPORT	10	150	104	153	2	419	74	112	191	2	379
RUTLAND	18	179	132	225	5	559	128	127	256	5	516
ST. ALBANS	21	175	99	218	4	517	125	134	217	5	481
ST. JOHNSBURY	15	108	99	124	5	351	77	72	167	5	321
SPRINGFIELD	12	89	57	103	4	265	58	68	108	4	238
WHITE RIVER JCT	7	100	63	90	2	262	53	68	114	2	237
TOTAL	180	1691	1149	1890	63	4973	1147	1215	2138	64	4564

BMI categories and weight gain recommendations defined by the Institute of Medicine, see page 2.

#### ROW PERCENTS - EXCLUDING UNKNOWNS

	UNDER- WEIGHT	HEALTHY WEIGHT	OVER- WEIGHT	OBESE		BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES
	4.0	33.6	22.0	40.4		22.9	29.5	47.6
GTON	2.8	31.3	23.6	42.3		25.3	25.0	49.7
TTLEBORO	4.4	34.1	23.4	38.1		25.9	27.9	46.2
RLINGTON	3.7	37.5 +	24.6	34.1 -		30.1 +	27.3	42.6 -
DLEBURY	5.0	30.7	22.8	41.5		27.4	23.5	49.1
RRISVILLE	3.4	36.6	20.5	39.4		25.3	26.8	47.9
PORT	2.4	36.0	24.9	36.7		19.6 -	29.7	50.7
LAND	3.2	32.3	23.8	40.6		25.0	24.9	50.1
ALBANS	4.1	34.1	19.3 -	42.5 +		26.3	28.2	45.6
OHNSBURY	4.3	31.2	28.6 +	35.8		24.4	22.8 -	52.8 +
INGFIELD	4.6	34.1	21.8	39.5		24.8	29.1	46.2
E RIVER JCT	2.7	38.5	24.2	34.6		22.6	28.9	48.5
_	3.7	34.4	23.4	38.5		25.5	27.0	47.5

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

<sup>\*</sup> Only includes women who delivered full-term singleton or twin births.

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

### MONTH PRENATAL CARE BEGAN BY DISTRICT NUMBER OF EVENTS AND CUMULATIVE ROW PERCENTS

#### MONTH PRENATAL CARE BEGAN

#### NUMBER OF EVENTS

DISTRICT	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH		UNKNOWN	TOTAL
BARRE	5	154	190	 59	19	5	6	 5	4	0	12	459
BENNINGTON	13	118	184	53	17	5	3	2	1	0	1	397
BRATTLEBORO	10	132	73	36	10	8	4	1	0	0	0	274
BURLINGTON	7	259	444	144	44	19	8	6	1	1	7	940
MIDDLEBURY	0	128	88	16	7	2	4	1	0	0	6	252
MORRISVILLE	1	101	138	37	11	3	4	2	0	1	7	305
NEWPORT	24	200	130	35	14	8	3	3	0	3	5	425
RUTLAND	3	158	301	55	22	10	6	4	2	1	3	565
ST. ALBANS	9	300	132	43	16	12	3	5	0	3	1	524
ST. JOHNSBURY	4	104	174	34	17	7	3	3	3	0	77	426
SPRINGFIELD	7	111	85	28	13	7	7	1	0	4	0	263
WHITE RIVER JCT	2	107	122	22	8	5	2	1	2	0	0	271
TOTAL	85	1872	2061	562	198	91	53	34	13	13	77	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

DISTRICT	FIRST	SECOND	THIRD		FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	NONE
BARRE	1.1	35.6	78.1		91.3	95.5	96.6	98.0	99.1	100.0	100.0
BENNINGTON	3.3	33.1	79.5		92.9	97.2	98.5	99.2	99.7	100.0	100.0
BRATTLEBORO	3.6	51.8	78.5		91.6	95.3	98.2	99.6	100.0	100.0	100.0
BURLINGTON	0.8	28.5	76.1	-	91.5	96.2	98.3	99.1	99.8	99.9	100.0
MIDDLEBURY	0.0	52.0	87.8	+	94.3	97.2	98.0	99.6	100.0	100.0	100.0
MORRISVILLE	0.3	34.2	80.5		93.0	96.6	97.7	99.0	99.7	99.7	100.0
NEWPORT	5.7	53.3	84.3	+	92.6	96.0	97.9	98.6	99.3	99.3	100.0
RUTLAND	0.5	28.6	82.2		92.0	95.9	97.7	98.8	99.5	99.8	100.0
ST. ALBANS	1.7	59.1	84.3	+	92.5	95.6	97.9	98.5	99.4	99.4	100.0
ST. JOHNSBURY	1.1	30.9	80.8		90.5	95.4	97.4	98.3	99.1	100.0	100.0
SPRINGFIELD	2.7	44.9	77.2		87.8	92.8	95.4	98.1	98.5	98.5	100.0
WHITE RIVER JCT	0.7	40.2	85.2	+	93.4	96.3	98.2	98.9	99.3	100.0	100.0
TOTAL	1.7	39.3	80.7		91.9	95.9	97.7	98.8	99.5	99.7	100.0

significantly higher than state percentage of first trimester care entry (95% confidence level); - significantly lower than state percenta

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

# ADEQUACY OF PRENATAL CARE UTILIZATION BY DISTRICT (Kotelchuck Index)

#### NUMBER OF EVENTS AND ROW PERCENTS

#### NUMBER OF EVENTS

DISTRICT	Inadequate	Intermediate	Adequate	Intensive	Unknown	TOTAL
BARRE	41	28	186	190	14	459
BENNINGTON	29	36	169	160	11	405
BRATTLEBORO	24	12	76	162	12	286
BURLINGTON	89	73	382	382	21	947
MIDDLEBURY	16	8	99	123	1	247
MORRISVILLE	23	15	181	79	0	298
NEWPORT	34	29	174	183	7	427
RUTLAND	48	22	203	288	7	568
ST. ALBANS	43	38	244	197	8	530
ST. JOHNSBURY	34	24	144	144	8	354
SPRINGFIELD	36	37	90	100	3	266
WHITE RIVER JCT	19	17	106	129	1	272
TOTAL	436	339	2054	2137	93	5059

#### ROW PERCENTS - EXCLUDING UNKNOWNS

	KOW PE	KCEN13 - EACLU	DING UNKNOW	INS		PERCENT WITH AT LEAST ADEQUATE
DISTRICT	Inadequate	Intermediate	Adequate	Intensive	DISTRICT	CARE UTILIZATION
BARRE	9.2	6.3	41.8	42.7	BARRE	84.5
BENNINGTON	7.4	9.1	42.9	40.6	BENNINGTON	83.5
BRATTLEBORO	8.8	4.4	27.7	59.1	BRATTLEBORO	86.9
BURLINGTON	9.6	7.9	41.3	41.3	BURLINGTON	82.5
MIDDLEBURY	6.5	3.3	40.2	50.0	MIDDLEBURY	90.2 +
MORRISVILLE	7.7	5.0	60.7	26.5	MORRISVILLE	87.2
NEWPORT	8.1	6.9	41.4	43.6	NEWPORT	85.0
RUTLAND	8.6	3.9	36.2	51.3	RUTLAND	87.5 <b>+</b>
ST. ALBANS	8.2	7.3	46.7	37.7	ST. ALBANS	84.5
ST. JOHNSBURY	9.8	6.9	41.6	41.6	ST. JOHNSBURY	83.2
SPRINGFIELD	13.7	14.1	34.2	38.0	SPRINGFIELD	72.2 <b>-</b>
WHITE RIVER JCT	7.0	6.3	39.1	47.6	WHITE RIVER JCT	86.7
TOTAL	8.8	6.8	41.4	43.0	TOTAL	84.4

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

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VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### SMOKING BEFORE PREGNANCY AND QUIT RATES BY DISTRICT

DISTRICT	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	Unknown	TOTAL	Smoked Before Pregnancy or During First Trimester^	Quit^*
BARRE	170	280	9	459	171	39
BENNINGTON	146	244	15	405	145	43
BRATTLEBORO	89	187	10	286	90	25
BURLINGTON	190	744	13	947	192	46
MIDDLEBURY	71	173	3	247	71	13
MORRISVILLE	86	208	4	298	86	15
NEWPORT	127	288	12	427	128	36
RUTLAND	202	361	5	568	202	44
ST. ALBANS	170	342	18	530	170	49
ST. JOHNSBURY	124	223	7	354	124	37
SPRINGFIELD	89	174	3	266	89	16
WHITE RIVER JCT	86	183	3	272	86	20
TOTAL	1550	3407	102	5059	1554	383

#### PERCENTAGES

ISTRICT	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	DISTRICT	
RE	37.8 +	62.2	BARRE	
NINGTON	37.4 +	62.6	BENNINGTON	
ΓLEBORO	32.2	67.8	BRATTLEBORO	
INGTON	20.3 -	79.7	BURLINGTON	
DLEBURY	29.1	70.9	MIDDLEBURY	
RISVILLE	29.3	70.7	MORRISVILLE	
PORT	30.6	69.4	NEWPORT	
AND	35.9 +	64.1	RUTLAND	
BANS	33.2	66.8	ST. ALBANS	
HNSBURY	35.7 +	64.3	ST. JOHNSBURY	
IGFIELD	33.8	66.2	SPRINGFIELD	
E RIVER JCT	32.0	68.0	WHITE RIVER JCT	
L	31.3	68.7	TOTAL	

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

<sup>^</sup> Excludes mothers with missing smoking data for the 2nd or 3rd trimester.

<sup>\*</sup> Mothers who did not smoke in the 2nd or 3rd trimester after smoking either before pregnancy or in the 1st trimester.

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VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### AGE OF MOTHER BY DISTRICT NUMBER OF EVENTS AND ROW PERCENTS

#### AGE OF MOTHER

#### NUMBER OF EVENTS

DISTRICT	<15 YEARS	15-17 YEARS	18-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40-44 YEARS	45 + YEARS	UNKNOWN	TOTAL
BARRE	0		33	109	149	96	48	17	0	0	459
BENNINGTON	0	5	30	118	115	90	42	5	0	0	405
BRATTLEBORO	0	3	15	70	87	69	36	6	0	0	286
BURLINGTON	0	11	50	207	308	228	111	27	5	0	947
MIDDLEBURY	0	3	15	75	85	48	17	4	0	0	247
MORRISVILLE	0	5	22	81	96	61	27	5	1	0	298
NEWPORT	1	13	20	158	143	67	23	2	0	0	427
RUTLAND	0	11	22	157	170	147	49	11	1	0	568
ST. ALBANS	0	6	47	180	150	103	42	2	0	0	530
ST. JOHNSBURY	0	5	16	99	122	77	30	5	0	0	354
SPRINGFIELD	0	4	26	68	80	62	22	4	0	0	266
WHITE RIVER JCT	0	3	12	80	86	65	19	6	1	0	272
TOTAL	1	76	308	1402	1591	1113	466	94	8	0	5059
					ROW PE	ERCENTS					
	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +		
DISTRICT	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	UNKNOWN	TOTAL
BARRE	0.0	1.5	7.2	23.7	32.5	20.9	10.5	3.7	0.0	0.0	100.0
BENNINGTON	0.0	1.2	7.4	29.1	28.4	22.2	10.4	1.2	0.0	0.0	100.0
BRATTLEBORO	0.0	1.0	5.2	24.5	30.4	24.1	12.6	2.1	0.0	0.0	100.0
BURLINGTON	0.0	1.2	5.3	21.9	32.5	24.1	11.7	2.9	0.5	0.0	100.0
MIDDLEBURY	0.0	1.2	6.1	30.4	34.4	19.4	6.9	1.6	0.0	0.0	100.0
MORRISVILLE	0.0	1.7	7.4	27.2	32.2	20.5	9.1	1.7	0.3	0.0	100.0
NEWPORT	0.2	3.0 +	4.7	37.0	33.5	15.7	5.4	0.5	0.0	0.0	100.0
RUTLAND	0.0	1.9	3.9 -	27.6	29.9	25.9	8.6	1.9	0.2	0.0	100.0
ST. ALBANS	0.0	1.1	8.9 +	34.0	28.3	19.4	7.9	0.4	0.0	0.0	100.0
ST. JOHNSBURY	0.0	1.4	4.5	28.0	34.5	21.8	8.5	1.4	0.0	0.0	100.0
SPRINGFIELD	0.0	1.5	9.8 +	25.6	30.1	23.3	8.3	1.5	0.0	0.0	100.0
WHITE RIVER JCT	0.0	1.1	4.4	29.4	31.6	23.9	7.0	2.2	0.4	0.0	100.0
TOTAL	0.0	1.5	6.1	27.7	31.4	22.0	9.2	1.9	0.2	0.0	100.0

<sup>+</sup> significantly higher than state percentage (95% confidence level); - significantly lower than state percentage

WIC New Families at Risk by District

First Births to Women <20, Unmarried, and <HS Education

2017-2019

	WIC	Number to Women	
	First	<20, Unmarried,	
District	Births	< HS Education	Percent
Barre	157	21	13.4% +
Bennington	139	14	10.1%
Brattleboro	95	10	10.5%
Burlington	326	19	5.8% -
Middlebury	104	4	3.8% -
Morrisville	108	10	9.3%
Newport	146	18	12.3%
Rutland	196	15	7.7%
St. Albans	199	21	10.6%
St.Johnsbury	125	9	7.2%
Springfield	103	14	13.6%
White River Jct.	104	4	3.8% -
Vermont	1802	159	8.8%

<sup>+/- =</sup> significantly higher/lower than state average rate.

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VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### BIRTHWEIGHT IN GRAMS BY COUNTY OF RESIDENCE NUMBER OF EVENTS AND ROW PERCENTS

#### BIRTHWEIGHT

#### NUMBER OF EVENTS

COUNTY OF RESIDENCE	<500g	500- 999g	1000- 1499g	1500- 1999g	2000- 2499g	2500- 2999g	3000- 3499g	3500- 3999g	4000- 4499g	4500- 4999g	5000- 5499g		UNKNOWN	TOTAL
ADDISON	0	0	1	1	14	44	102	62	23	0	0	0	0	247
BENNINGTON	0	3	5	9	29	72	153	104	27	2	1	0	0	405
CALEDONIA	0	0	4	7	28	55	132	67	30	2	1	0	0	326
CHITTENDEN	2	1	4	13	53	224	335	222	81	10	2	0	0	947
ESSEX	0	0	0	0	1	13	25	17	7	0	0	0	0	63
FRANKLIN	0	1	3	6	31	85	177	111	52	5	2	0	1	474
GRAND ISLE	0	0	0	0	3	9	20	15	7	2	0	0	0	56
LAMOILLE	0	1	3	4	14	40	99	51	22	2	0	0	0	236
ORANGE	0	2	0	7	16	42	78	65	17	3	0	0	0	230
ORLEANS	1	1	3	13	23	73	164	100	25	4	0	1	0	408
RUTLAND	0	3	5	10	44	109	205	146	40	4	1	0	1	568
WASHINGTON	0	2	3	4	27	88	141	98	29	3	1	0	1	397
WINDHAM	0	2	5	5	22	59	118	84	39	6	0	0	0	340
WINDSOR	0	0	7	7	16	80	134	93	23	2	0	0	0	362
TOTAL	3	16	43	86	321	993	1883	1235	422	45	8	1	3	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

COUNTY OF RESIDENCE	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
ADDISON	0.0	0.0	0.4	0.8	6.5	24.3	65.6	90.7	100.0	100.0	100.0	100.0
BENNINGTON	0.0	0.7	2.0	4.2	11.4	29.1	66.9	92.6	99.3	99.8	100.0	100.0
CALEDONIA	0.0	0.0	1.2	3.4	12.0	28.8	69.3	89.9	99.1	99.7	100.0	100.0
CHITTENDEN	0.2	0.3	0.7	2.1	7.7	31.4	66.7	90.2	98.7	99.8	100.0	100.0
ESSEX	0.0	0.0	0.0	0.0	1.6	22.2	61.9	88.9	100.0	100.0	100.0	100.0
FRANKLIN	0.0	0.2	0.8	2.1	8.7	26.6	64.1	87.5	98.5	99.6	100.0	100.0
GRAND ISLE	0.0	0.0	0.0	0.0	5.4	21.4	57.1	83.9	96.4	100.0	100.0	100.0
LAMOILLE	0.0	0.4	1.7	3.4	9.3	26.3	68.2	89.8	99.2	100.0	100.0	100.0
ORANGE	0.0	0.9	0.9	3.9	10.9	29.1	63.0	91.3	98.7	100.0	100.0	100.0
ORLEANS	0.2	0.5	1.2	4.4	10.0	27.9	68.1	92.6	98.8	99.8	99.8	100.0
RUTLAND	0.0	0.5	1.4	3.2	10.9	30.2	66.3	92.1	99.1	99.8	100.0	100.0
WASHINGTON	0.0	0.5	1.3	2.3	9.1	31.3	66.9	91.7	99.0	99.7	100.0	100.0
WINDHAM	0.0	0.6	2.1	3.5	10.0	27.4	62.1	86.8	98.2	100.0	100.0	100.0
WINDSOR	0.0	0.0	1.9	3.9	8.3	30.4	67.4	93.1	99.4	100.0	100.0	100.0
TOTAL	0.1	0.4	1.2	2.9	9.3	28.9	66.2	90.6	98.9	99.8	100.0	100.0

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

# SINGLETON BIRTHWEIGHT IN GRAMS BY COUNTY OF RESIDENCE NUMBER OF EVENTS AND ROW PERCENTS

#### BIRTHWEIGHT

#### NUMBER OF EVENTS

COUNTY OF RESIDENCE	<500g	500- 999g	1000- 1499g	1500- 1999g	2000- 2499g	2500- 2999g	3000- 3499g	3500- 3999g	4000- 4499g	4500- 4999g	5000- 5499g	_	UNKNOWN	TOTAL
ADDISON	0	0	1	1	10	40	102	62	23	0	0	0	0	239
BENNINGTON	0	3	0	7	25	66	151	103	27	2	1	0	0	385
CALEDONIA	0	0	4	5	26	55	132	67	30	2	1	0	0	322
CHITTENDEN	2	1	3	10	49	221	333	221	81	10	2	0	0	933
ESSEX	0	0	0	0	1	13	25	17	7	0	0	0	0	63
FRANKLIN	0	1	2	1	20	76	176	111	52	5	2	0	1	447
GRAND ISLE	0	0	0	0	3	9	20	15	7	2	0	0	0	56
LAMOILLE	0	1	1	3	12	38	99	51	22	2	0	0	0	229
ORANGE	0	2	0	3	10	34	78	64	17	3	0	0	0	211
ORLEANS	1	0	2	9	20	68	162	100	25	4	0	1	0	392
RUTLAND	0	3	3	8	36	103	205	146	40	4	1	0	1	550
WASHINGTON	0	2	0	1	21	85	140	98	29	3	1	0	1	381
WINDHAM	0	2	3	3	18	53	117	83	39	6	0	0	0	324
WINDSOR	0	0	7	3	15	78	133	92	23	2	0	0	0	353
TOTAL	3	15	26	54	266	939	1873	1230	422	45	8	1	3	4885

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

COUNTY OF RESIDENCE	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
ADDISON	0.0	0.0	0.4	0.8	5.0	21.8	64.4	90.4	100.0	100.0	100.0	100.0
BENNINGTON	0.0	0.8	0.8	2.6	9.1	26.2	65.5	92.2	99.2	99.7	100.0	100.0
CALEDONIA	0.0	0.0	1.2	2.8	10.9 +	28.0	68.9	89.8	99.1	99.7	100.0	100.0
CHITTENDEN	0.2	0.3	0.6	1.7	7.0	30.7	66.3	90.0	98.7	99.8	100.0	100.0
ESSEX	0.0	0.0	0.0	0.0	1.6	22.2	61.9	88.9	100.0	100.0	100.0	100.0
FRANKLIN	0.0	0.2	0.7	0.9	5.4 <b>-</b>	22.4	61.9	86.8	98.4	99.6	100.0	100.0
GRAND ISLE	0.0	0.0	0.0	0.0	5.4	21.4	57.1	83.9	96.4	100.0	100.0	100.0
LAMOILLE	0.0	0.4	0.9	2.2	7.4	24.0	67.2	89.5	99.1	100.0	100.0	100.0
ORANGE	0.0	0.9	0.9	2.4	7.1	23.2	60.2	90.5	98.6	100.0	100.0	100.0
ORLEANS	0.3	0.3	0.8	3.1	8.2	25.5	66.8	92.3	98.7	99.7	99.7	100.0
RUTLAND	0.0	0.5	1.1	2.6	9.1	27.9	65.2	91.8	99.1	99.8	100.0	100.0
WASHINGTON	0.0	0.5	0.5	0.8	6.3	28.7	65.5	91.3	98.9	99.7	100.0	100.0
WINDHAM	0.0	0.6	1.5	2.5	8.0	24.4	60.5	86.1	98.1	100.0	100.0	100.0
WINDSOR	0.0	0.0	2.0 +	2.8	7.1	29.2	66.9	92.9	99.4	100.0	100.0	100.0
TOTAL	0.1	0.4	0.9	2.0	7.5	26.7	65.1	90.2	98.9	99.8	100.0	100.0

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

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VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### WEEKS GESTATION BY COUNTY OF RESIDENCE NUMBER OF EVENTS AND ROW PERCENTS

#### NUMBER OF EVENTS

COUNTY OF RESIDENCE	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks	Unknown Weeks	TOTAL
ADDISON	0	1	2	13	 72	158	 1	0	247
BENNINGTON	4	4	3	35	94	264	1	0	405
CALEDONIA	0	7	4	20	75	217	3	0	326
CHITTENDEN	2	2	6	60	244	625	7	1	947
ESSEX	0	0	0	2	17	44	0	0	63
FRANKLIN	0	3	10	28	90	342	0	1	474
GRAND ISLE	0	0	1	1	13	41	0	0	56
LAMOILLE	1	2	4	18	66	140	5	0	236
ORANGE	1	2	6	15	60	145	1	0	230
ORLEANS	1	6	8	32	111	249	0	1	408
RUTLAND	3	5	7	32	166	354	1	0	568
WASHINGTON	1	1	1	38	106	248	2	0	397
WINDHAM	0	8	2	19	89	219	2	1	340
WINDSOR	2	5	7	19	88	240	1	0	362
TOTAL	15	46	61	332	1291	3286	24	4	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

COUNTY OF		28-31	32-33	34-36	37-38	39-41	42+	
RESIDENCE	<28 Weeks							
ADDISON	0.0	0.4	1.2	6.5	35.6	99.6	100.0	
BENNINGTON	1.0	2.0	2.7	11.4	34.6	99.8	100.0	
CALEDONIA	0.0	2.1	3.4	9.5	32.5	99.1	100.0	
CHITTENDEN	0.2	0.4	1.1 -	7.4	33.2	99.3	100.0	
ESSEX	0.0	0.0	0.0	3.2 -	30.2	100.0	100.0	
FRANKLIN	0.0	0.6	2.7	8.7	27.7	100.0	100.0	
GRAND ISLE	0.0	0.0	1.8	3.6	26.8	100.0	100.0	
LAMOILLE	0.4	1.3	3.0	10.6	38.6	97.9	100.0	
ORANGE	0.4	1.3	3.9	10.4	36.5	99.6	100.0	
ORLEANS	0.2	1.7	3.7	11.5	38.8	100.0	100.0	
RUTLAND	0.5	1.4	2.6	8.3	37.5	99.8	100.0	
WASHINGTON	0.3	0.5	0.8	10.3	37.0	99.5	100.0	
WINDHAM	0.0	2.4	2.9	8.6	34.8	99.4	100.0	
WINDSOR	0.6	1.9	3.9	9.1	33.4	99.7	100.0	
TOTAL	0.3	1.2	2.4	9.0	34.5	99.5	100.0	

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

 $\textbf{108 Cherry Street, Burlington, VT 05401} \cdot \textbf{802-863-7200} \cdot \textbf{www.healthvermont.gov}$ 

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

# PRE-PREGNANCY BMI and WEIGHT GAIN DURING PREGNANCY BY COUNTY NUMBER OF MOTHERS AND ROW PERCENTS

#### NUMBER OF EVENTS

			PRE-PREGNA	NCY BMI		WEIGHT GAIN DURING PREGNANCY*					
	UNDER-	HEALTHY	OVER-				BELOW	WITHIN	ABOVE		
COUNTY	WEIGHT	WEIGHT	WEIGHT	OBESE	UNKNOWN	TOTAL	GUIDELINES	GUIDELINES	GUIDELINES	UNKNOWN	TOTAL
ADDISON	12	74	55	100	2	243	62	53	111	2	228
BENNINGTON	11	122	92	165	5	395	89	88	175	5	357
CALEDONIA	11	105	95	109	4	324	70	71	150	4	295
CHITTENDEN	34	344	226	313	23	940	255	231	361	23	870
ESSEX	3	23	19	17	1	63	18	17	25	1	61
FRANKLIN	18	155	89	195	4	461	107	120	195	5	427
GRAND ISLE	3	20	10	23	0	56	18	14	22	0	54
LAMOILLE	9	82	44	95	3	233	45	58	105	3	211
ORANGE	6	81	49	84	0	220	55	52	94	0	201
ORLEANS	10	140	99	149	2	400	71	104	183	2	360
RUTLAND	18	179	132	225	5	559	128	127	256	5	516
WASHINGTON	17	123	86	160	3	389	76	105	171	3	355
WINDHAM	15	117	75	119	6	332	76	85	135	6	302
WINDSOR	13	126	78	136	5	358	77	90	155	5	327
TOTAL	180	1691	1149	1890	63	4973	1147	1215	2138	64	4564

BMI categories and weight gain recommendations defined by the Institute of Medicine, see page 2.

#### ROW PERCENTS - EXCLUDING UNKNOWNS

UNDER- WEIGHT		OVER- WEIGHT	OBESE	BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES
5.0	30.7	22.8	41.5	 27.4	23.5	49.1
2.8	31.3	23.6	42.3	25.3	25.0	49.7
3.4	32.8	29.7	34.1 -	24.1	24.4	51.5
3.7	37.5 -	+ 24.6 +	34.1	30.1 +	27.3	42.6 -
4.8	37.1	30.6	27.4	30.0	28.3	41.7
3.9	33.9	19.5	42.7 +	25.4	28.4	46.2
5.4	35.7	17.9	41.1	33.3	25.9	40.7
3.9	35.7	19.1	41.3	21.6	27.9	50.5
2.7	36.8	22.3	38.2	27.4	25.9	46.8
2.5	35.2	24.9	37.4	19.8 -	29.1	51.1
3.2	32.3	23.8	40.6	25.0	24.9	50.1
4.4	31.9	22.3	41.5	21.6 -	29.8	48.6
4.6	35.9	23.0	36.5	25.7	28.7	45.6
3.7	35.7	22.1	38.5	23.9	28.0	48.1
3.7	34.4	23.4	38.5	25.5	27.0	47.5

<sup>-</sup> significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

<sup>\*</sup> Only includes women who delivered full-term singleton or twin births.

November 8, 2022

COLINTY OF

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

MONTH PRENATAL CARE BEGAN BY COUNTY OF RESIDENCE NUMBER OF EVENTS AND CUMULATIVE ROW PERCENTS

#### MONTH PRENATAL CARE BEGAN

#### NUMBER OF EVENTS

COUNTY OF RESIDENCE	FIRST	SECOND	THIRD	FOURTH	FIFTH		SEVENTH	EIGHTH	NINTH		UNKNOWN	TOTAL
ADDISON	0	128	88	16	7	2	4	1	0	0	1	247
BENNINGTON	13	118	184	53	17	5	3	2	1	0	9	405
CALEDONIA	3	96	162	35	15	5	3	2	2	0	3	326
CHITTENDEN	7	259	444	144	44	19	8	6	1	1	14	947
ESSEX	3	13	29	7	3	2	1	2	1	0	2	63
FRANKLIN	9	271	114	38	15	11	3	5	0	3	5	474
GRAND ISLE	0	29	18	5	1	1	0	0	0	0	2	56
LAMOILLE	1	83	105	28	11	3	3	1	0	1	0	236
ORANGE	4	74	107	26	7	4	3	2	2	0	1	230
ORLEANS	21	198	122	33	12	7	3	2	0	3	7	408
RUTLAND	3	158	301	55	22	10	6	4	2	1	6	568
WASHINGTON	4	134	167	48	16	5	5	5	2	0	11	397
WINDHAM	12	151	90	44	12	9	7	1	0	2	12	340
WINDSOR	5	160	130	30	16	8	4	1	2	2	4	362
TOTAL	85	1872	2061	562	198	91	53	34	13	13	77	5059

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNS

RESIDENCE	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	NONE
ADDISON	0.0	52.0	87.8 +	94.3	97.2	98.0	99.6	100.0	100.0	100.0
BENNINGTON	3.3	33.1	79.5	92.9	97.2	98.5	99.2	99.7	100.0	100.0
CALEDONIA	0.9	30.7	80.8	91.6	96.3	97.8	98.8	99.4	100.0	100.0
CHITTENDEN	0.8	28.5	76.1 -	91.5	96.2	98.3	99.1	99.8	99.9	100.0
ESSEX	4.9	26.2	73.8	85.2	90.2	93.4	95.1	98.4	100.0	100.0
FRANKLIN	1.9	59.7	84.0 +	92.1	95.3	97.7	98.3	99.4	99.4	100.0
GRAND ISLE	0.0	53.7	87.0	96.3	98.1	100.0	100.0	100.0	100.0	100.0
LAMOILLE	0.4	35.6	80.1	91.9	96.6	97.9	99.2	99.6	99.6	100.0
ORANGE	1.7	34.1	80.8	92.1	95.2	96.9	98.3	99.1	100.0	100.0
ORLEANS	5.2	54.6	85.0 +	93.3	96.3	98.0	98.8	99.3	99.3	100.0
RUTLAND	0.5	28.6	82.2	92.0	95.9	97.7	98.8	99.5	99.8	100.0
WASHINGTON	1.0	35.8	79.0	91.5	95.6	96.9	98.2	99.5	100.0	100.0
WINDHAM	3.7	49.7	77.1	90.5	94.2	97.0	99.1	99.4	99.4	100.0
WINDSOR	1.4	46.1	82.4	90.8	95.3	97.5	98.6	98.9	99.4	100.0
TOTAL	1.7	39.3	80.7	91.9	95.9	97.7	98.8	99.5	99.7	100.0

<sup>+</sup> significantly higher than state percentage of first trimester care entry (95% confidence level); - significantly lower than state percentage

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

### ADEQUACY OF PRENATAL CARE UTILIZATION BY COUNTY OF RESIDENCE (Kotelchuck Index)

#### NUMBER OF EVENTS AND ROW PERCENTS

#### NUMBER OF EVENTS

COUNTY OF						
RESIDENCE	Inadequate	Intermediate	Adequate	Intensive	Unknown	TOTAL
ADDISON	16	8	99	123	1	247
BENNINGTON	29	36	169	160	11	405
CALEDONIA	30	18	142	130	6	326
CHITTENDEN	89	73	382	382	21	947
ESSEX	10	5	25	21	2	63
FRANKLIN	41	32	220	175	6	474
GRAND ISLE	2	6	24	22	2	56
LAMOILLE	19	13	144	60	0	236
ORANGE	19	15	95	99	2	230
ORLEANS	29	26	167	179	7	408
RUTLAND	48	22	203	288	7	568
WASHINGTON	35	24	162	164	12	397
WINDHAM	33	17	90	188	12	340
WINDSOR	36	44	132	146	4	362
TOTAL	436	339	2054	2137	93	5059

#### ROW PERCENTS - EXCLUDING UNKNOWNS

COUNTY OF RESIDENCE	Inadequate	Intermediate	Adequate	Intensive	COUNTY OF RESIDENCE	PERCENT WITH AT LEAST ADEQUATE CARE UTILIZATION
ADDISON	6.5	3.3	40.2	50.0	ADDISON	90.2 <b>+</b>
BENNINGTON	7.4	9.1	42.9	40.6	BENNINGTON	83.5
CALEDONIA	9.4	5.6	44.4	40.6	CALEDONIA	85.0
CHITTENDEN	9.6	7.9	41.3	41.3	CHITTENDEN	82.5
ESSEX	16.4	8.2	41.0	34.4	ESSEX	75.4 <b>-</b>
FRANKLIN	8.8	6.8	47.0	37.4	FRANKLIN	84.4
GRAND ISLE	3.7	11.1	44.4	40.7	GRAND ISLE	85.2
LAMOILLE	8.1	5.5	61.0	25.4	LAMOILLE	86.4
ORANGE	8.3	6.6	41.7	43.4	ORANGE	85.1
ORLEANS	7.2	6.5	41.6	44.6	ORLEANS	86.3
RUTLAND	8.6	3.9	36.2	51.3	RUTLAND	87.5 <b>+</b>
WASHINGTON	9.1	6.2	42.1	42.6	WASHINGTON	84.7
WINDHAM	10.1	5.2	27.4	57.3	WINDHAM	84.8
WINDSOR	10.1	12.3	36.9	40.8	WINDSOR	77.7 <b>-</b>
TOTAL	8.8	6.8	41.4	43.0	TOTAL	84.4

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

#### SMOKING BEFORE PREGNANCY AND QUIT RATES BY COUNTY OF RESIDENCE

COUNTY OF RESIDENCE	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	Unknown	TOTAL	Smoked Before Pregnancy or During First Trimester^	Quit^*
ADDISON	71	173	3	247	71	13
BENNINGTON	146	244	15	405	145	43
CALEDONIA	115	206	5	326	115	36
CHITTENDEN	190	744	13	947	192	46
ESSEX	21	41	1	63	22	4
FRANKLIN	153	305	16	474	153	44
GRAND ISLE	17	37	2	56	17	5
LAMOILLE	66	166	4	236	66	11
ORANGE	74	153	3	230	74	17
ORLEANS	115	281	12	408	115	32
RUTLAND	202	361	5	568	202	44
WASHINGTON	151	238	8	397	152	38
WINDHAM	106	224	10	340	107	25
WINDSOR	123	234	5	362	123	25
TOTAL	1550	3407	102	5059	1554	383

#### PERCENTAGES

COUNTY OF RESIDENCE	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	COUNTY OF RESIDENCE	Percent of Smokers Who Quit^*
ADDISON	29.1	70.9	ADDISON	18.3
BENNINGTON	37.4 +	62.6	BENNINGTON	29.7
CALEDONIA	35.8 +	64.2	CALEDONIA	31.3
CHITTENDEN	20.3 -	79.7	CHITTENDEN	24.0
ESSEX	33.9	66.1	ESSEX	18.2
FRANKLIN	33.4	66.6	FRANKLIN	28.8
GRAND ISLE	31.5	68.5	GRAND ISLE	29.4
LAMOILLE	28.4	71.6	LAMOILLE	16.7
ORANGE	32.6	67.4	ORANGE	23.0
ORLEANS	29.0	71.0	ORLEANS	27.8
RUTLAND	35.9 +	64.1	RUTLAND	21.8
WASHINGTON	38.8 +	61.2	WASHINGTON	25.0
WINDHAM	32.1	67.9	WINDHAM	23.4
WINDSOR	34.5	65.5	WINDSOR	20.3
TOTAL	31.3	68.7	TOTAL	24.6

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

<sup>+</sup> significantly higher than state percentage

<sup>-</sup> significantly lower than state percentage

<sup>^</sup> Excludes mothers with missing smoking data for the 2nd or 3rd trimester.

<sup>\*</sup> Mothers who did not smoke in the 2nd or 3rd trimester after smoking either before pregnancy or in the 1st trimester.

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2018 and DECEMBER 31, 2020

### AGE OF MOTHER BY COUNTY OF RESIDENCE NUMBER OF EVENTS AND ROW PERCENTS

#### AGE OF MOTHER

#### NUMBER OF EVENTS

COUNTY OF RESIDENCE	<15 YEARS	15-17 YEARS	18-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40-44 YEARS	45 + YEARS	UNKNOWN	TOTAL
ADDISON	0	3	15	75	85	48	17	4	0	0	247
BENNINGTON	0	5	30	118	115	90	42	5	0	0	405
CALEDONIA	0	5	19	97	113	57	30	5	0	0	326
CHITTENDEN	0	11	50	207	308	228	111	27	5	0	947
ESSEX	0	2	3	18	19	16	4	1	0	0	63
FRANKLIN	0	5	40	162	136	92	37	2	0	0	474
GRAND ISLE	0	1	7	18	14	11	5	0	0	0	56
LAMOILLE	0	3	15	63	84	49	18	4	0	0	236
ORANGE	0	2	12	68	69	51	24	3	1	0	230
ORLEANS	1	13	19	146	135	66	26	2	0	0	408
RUTLAND	0	11	22	157	170	147	49	11	1	0	568
WASHINGTON	0	7	28	93	129	87	36	16	1	0	397
WINDHAM	0	5	20	85	98	83	42	7	0	0	340
WINDSOR	0	3	28	95	116	88	25	7	0	0	362
TOTAL	1	76	308	1402	1591	1113	466	94	8	0	5059
					ROW PE	ERCENTS					
COUNTY OF	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +		
COUNTY OF RESIDENCE	<15 YEARS	15-17 YEARS	18-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40-44 YEARS	45 + YEARS	UNKNOWN	TOTAL
										UNKNOWN 	TOTAL 100.0
RESIDENCE	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS		
RESIDENCE ADDISON	YEARS	YEARS	YEARS 	YEARS 30.4	YEARS 34.4	YEARS 19.4	YEARS 	YEARS 	YEARS 0.0	0.0	100.0
RESIDENCEADDISON BENNINGTON	YEARS 	YEARS  1.2  1.2  1.5  1.2	YEARS  6.1  7.4  5.8  5.3	YEARS 30.4 29.1	YEARS 34.4 28.4	YEARS 19.4 22.2	YEARS 6.9 10.4	YEARS 	YEARS 0.0 0.0	0.0 0.0	100.0 100.0
ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX	9.0 0.0 0.0 0.0	YEARS 1.2 1.2 1.5	YEARS 6.1 7.4 5.8	YEARS 30.4 29.1 29.8 21.9 28.6	34.4 28.4 34.7 32.5 30.2	YEARS 19.4 22.2 17.5	YEARS 6.9 10.4 9.2	YEARS 1.6 1.2 1.5	YEARS 0.0 0.0 0.0	0.0 0.0 0.0	100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN	9.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.2 1.2 1.5 1.2 3.2 1.1	6.1 7.4 5.8 5.3 4.8 8.4 +	YEARS 30.4 29.1 29.8 21.9 28.6 34.2	34.4 28.4 34.7 32.5 30.2 28.7	YEARS  19.4 22.2 17.5 24.1 25.4 19.4	YEARS  6.9  10.4  9.2  11.7  6.3  7.8	YEARS  1.6 1.2 1.5 2.9 1.6 0.4	YEARS  0.0 0.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.2 1.5 1.2 3.2 1.1 1.8	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +	30.4 29.1 29.8 21.9 28.6 34.2 32.1	34.4 28.4 34.7 32.5 30.2 28.7 25.0	19.4 22.2 17.5 24.1 25.4 19.4 19.6	YEARS  6.9  10.4  9.2  11.7  6.3  7.8  8.9	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0	9.00 0.0 0.0 0.0 0.5 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0
ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.2 1.2 1.5 1.2 3.2 1.1 1.8 1.3	6.1 7.4 5.8 5.3 4.8 8.4 + 12.5 + 6.4	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6	19.4 22.2 17.5 24.1 25.4 19.4 19.6 20.8	6.9 10.4 9.2 11.7 6.3 7.8 8.9 7.6	1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7	9.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	YEARS  1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +  6.4  5.2	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0	19.4 22.2 17.5 24.1 25.4 19.4 19.6 20.8 22.2	YEARS  6.9  10.4  9.2  11.7  6.3  7.8  8.9  7.6  10.4	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE ORLEANS	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	YEARS  1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9 3.2 +	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +  6.4  5.2  4.7	YEARS  30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6 35.8	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0 33.1	YEARS  19.4 22.2 17.5 24.1 25.4 19.4 19.6 20.8 22.2 16.2	YEARS  6.9  10.4  9.2  11.7  6.3  7.8  8.9  7.6  10.4  6.4	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3 0.5	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE ORLEANS RUTLAND	9.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.2 1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9 3.2 +	7.4 5.8 5.3 4.8 8.4 + 12.5 + 6.4 5.2 4.7 3.9 -	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6 35.8 27.6	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0 33.1 29.9	19.4 22.2 17.5 24.1 25.4 19.6 20.8 22.2 16.2 25.9	YEARS  6.9 10.4 9.2 11.7 6.3 7.8 8.9 7.6 10.4 6.4 8.6	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3 0.5 1.9	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE ORLEANS RUTLAND WASHINGTON	900 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	YEARS  1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9 3.2 + 1.9 1.8	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +  6.4  5.2  4.7  3.9 -  7.1	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6 35.8 27.6 23.4	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0 33.1 29.9 32.5	YEARS  19.4 22.2 17.5 24.1 25.4 19.4 19.6 20.8 22.2 16.2 25.9 21.9	YEARS  6.9 10.4 9.2 11.7 6.3 7.8 8.9 7.6 10.4 6.4 8.6 9.1	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3 0.5 1.9 4.0	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE ORLEANS RUTLAND WASHINGTON WINDHAM	YEARS  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	YEARS  1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9 3.2 + 1.9 1.8 1.5	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +  6.4  5.2  4.7  3.9 -  7.1  5.9	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6 35.8 27.6 23.4 25.0	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0 33.1 29.9 32.5 28.8	19.4 22.2 17.5 24.1 25.4 19.6 20.8 22.2 16.2 25.9 21.9 24.4	YEARS  6.9 10.4 9.2 11.7 6.3 7.8 8.9 7.6 10.4 6.4 8.6 9.1 12.4	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3 0.5 1.9 4.0 2.1	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
RESIDENCE  ADDISON BENNINGTON CALEDONIA CHITTENDEN ESSEX FRANKLIN GRAND ISLE LAMOILLE ORANGE ORLEANS RUTLAND WASHINGTON	900 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	YEARS  1.2 1.5 1.2 3.2 1.1 1.8 1.3 0.9 3.2 + 1.9 1.8	7EARS  6.1  7.4  5.8  5.3  4.8  8.4 +  12.5 +  6.4  5.2  4.7  3.9 -  7.1	30.4 29.1 29.8 21.9 28.6 34.2 32.1 26.7 29.6 35.8 27.6 23.4	34.4 28.4 34.7 32.5 30.2 28.7 25.0 35.6 30.0 33.1 29.9 32.5	YEARS  19.4 22.2 17.5 24.1 25.4 19.4 19.6 20.8 22.2 16.2 25.9 21.9	YEARS  6.9 10.4 9.2 11.7 6.3 7.8 8.9 7.6 10.4 6.4 8.6 9.1	YEARS  1.6 1.2 1.5 2.9 1.6 0.4 0.0 1.7 1.3 0.5 1.9 4.0	YEARS  0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

<sup>+</sup> significantly higher than state percentage (95% confidence level); - significantly lower than state percentage

New Families at Risk

First Births to Women <20, Unmarried, and <HS Education

2017-2019

		Number to Women		
	First	<20, Unmarried,		
County	Births	< HS Education	Percent	
Addison	104	4	3.8% -	
Bennington	139	14	10.1%	
Caledonia	117	8	6.8%	
Chittenden	326	19	5.8% -	
Essex	17	2	11.8%	
Franklin	172	18	10.5%	
Grand Isle	27	3	11.1%	
Lamoille	82	8	9.8%	
Orange	89	6	6.7%	
Orleans	143	18	12.6%	
Rutland	196	15	7.7%	
Washington	133	17	12.8%	
Windham	122	14	11.5%	
Windsor	135	13	9.6%	
Vermont	1802	159	8.8%	

<sup>+/- =</sup> significantly higher/lower than state average rate.

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