

This is a maternal and child health surveillance report focused on births to WIC recipients for the three-year period from 2017-2019. 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](mailto:Michael.Nyland-Funke@vermont.gov).

### Highlights

- The low birth weight (<2500g) rate for WIC births from 2017-2019 was 8.7%. No district had a WIC low birthweight rate significantly higher than the state WIC rate for this period, while only the Middlebury district had a significantly lower rate than the state WIC rate.
- The very low birthweight (<1500g) rate was 1.2% for WIC births from 2017-2019.
- The low birthweight rate for singleton births was 6.7% for WIC births during this three-year period. The White River Jct. districts had a rate significantly higher than the state rate for WIC births while the Middlebury district had a significantly lower rate.
- The preterm delivery rate (<37 weeks gestation) was 9.0% among WIC births for 2017-2019. The Newport and Springfield districts had a significantly higher WIC preterm rate than the state, while St. Albans had a significantly lower rate.
- Among women on WIC who gave birth from 2017-2019, 35.6% had a healthy pre-pregnancy body-mass index (BMI). During this three-year period, 3.5% of WIC women giving birth were underweight pre-pregnancy, while 24.3% were overweight and 36.7% were obese (BMI > 30). The Burlington district had a significantly higher percentage of healthy weight and overweight mothers among WIC clients than the state, while also having a lower percentage of obese mothers. The Bennington, Middlebury and St. Albans districts had significantly higher rates of pre-pregnancy obesity.
- From 2017-2019, 28.0% of women on WIC achieved the recommended amount of weight gain during pregnancy, while 25.3% gained less weight than recommended and 46.7% 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 Rutland and St. Johnsbury districts 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.]

## Vermont WIC - Maternal and Child Health Annual Report – 2019

- The rate for first trimester prenatal care entry was 81.4% among WIC mothers from 2017-2019. The Newport, Rutland, 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 86.1% 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 2017-2019, 31.8% 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 21.5% in the Burlington district, to a high of 38.4% in the Bennington district.
- Of the women who smoked before pregnancy or during the first trimester from 2017-2019, 24.5% quit smoking for the second and third trimester. Quit rates also varied widely by district, from a low of 16.5% in Morrisville to a high of 32.4% in Brattleboro.
- 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 2017-2019. The Burlington, St. Johnsbury and White River Jct. districts had significantly lower percentage of new families at risk than the overall state WIC population, while Springfield had a significantly higher percentage.

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

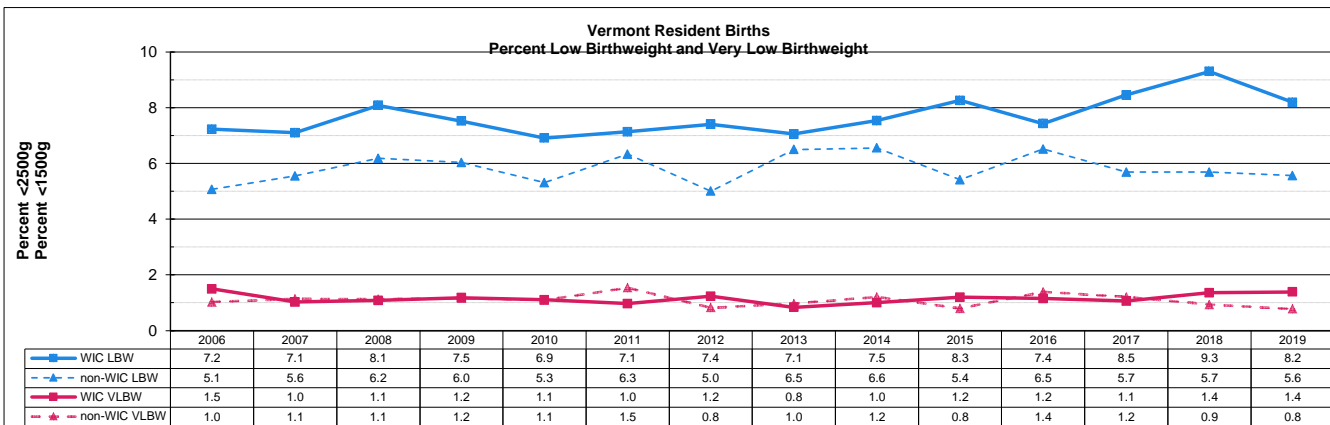
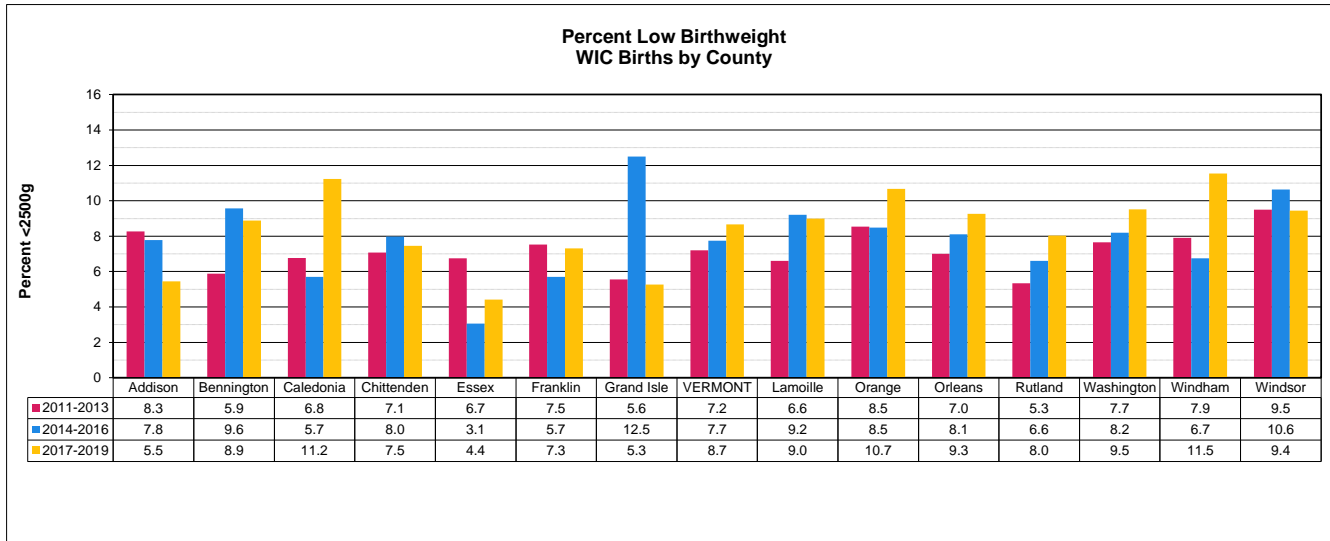
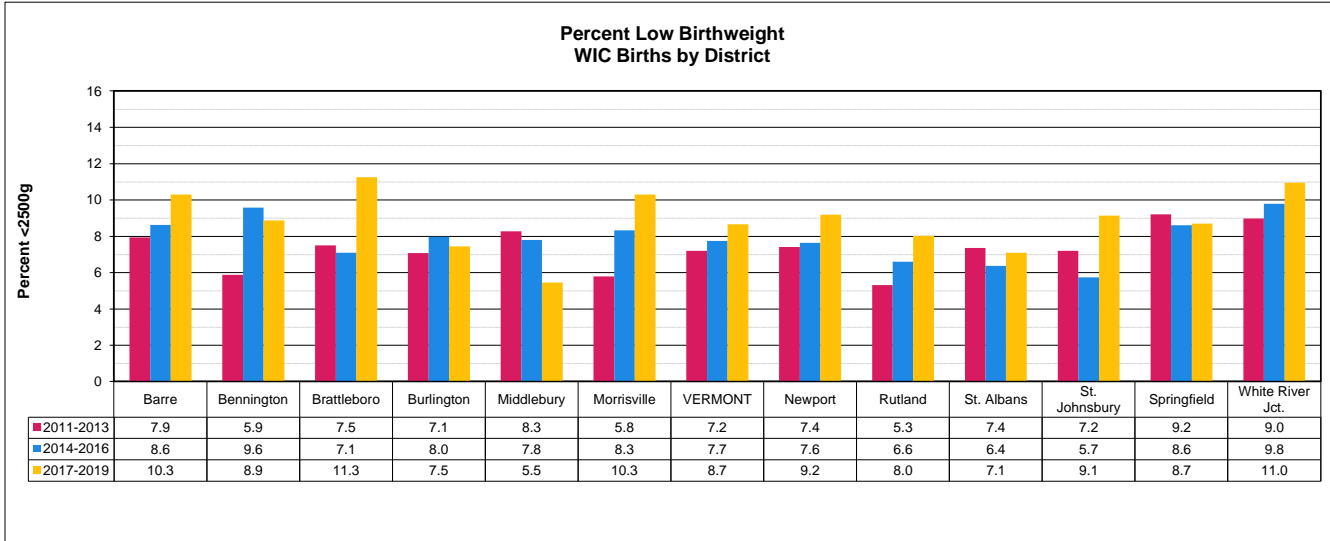
Pre-pregnancy BMI	BMI (kg/m <sup>2</sup> )	Weight Gain Recommendation	
		Single Gestation	Twin Gestation
Underweight	<18.5	28–40lbs	---
Normal weight	18.5-24.9	25–35lbs	37–54lbs
Overweight	25.0-29.9	15–25lbs	31–50lbs
Obese	≥30.0	11–20lbs	25–42lbs

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:

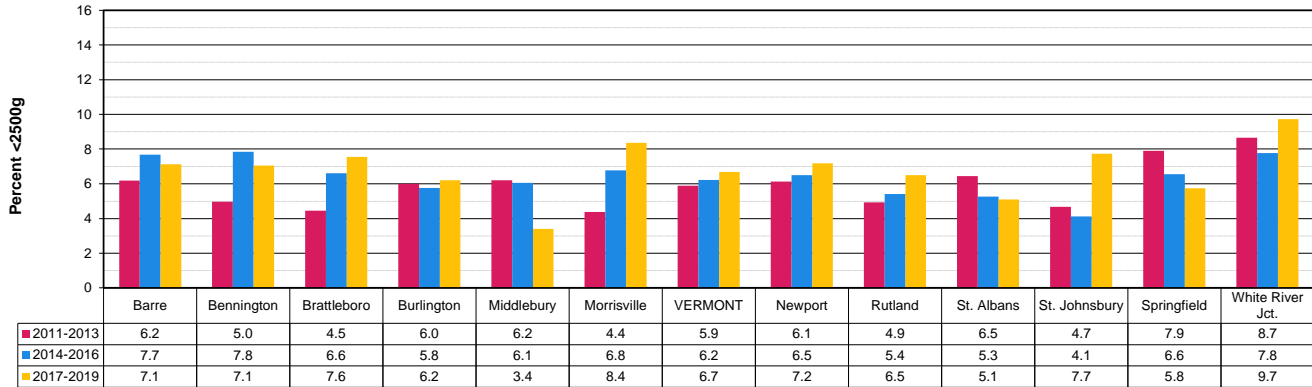
<http://iom.edu/About-IOM/Leadership-Staff/Boards/Food-and-Nutrition-Board/HealthyPregnancy.aspx>

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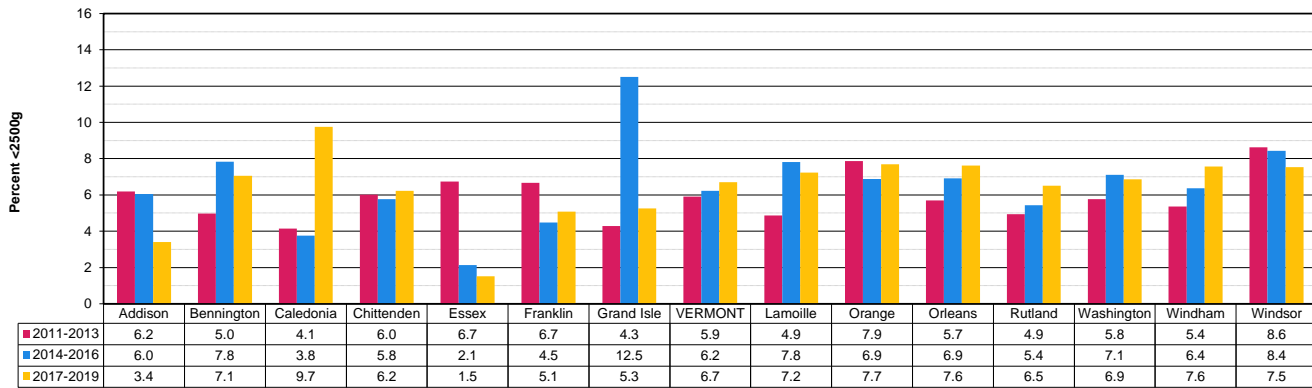


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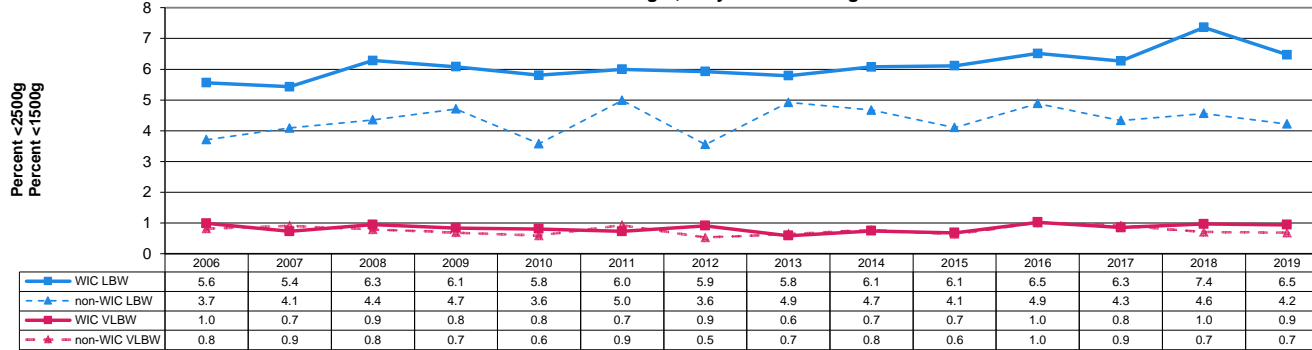
### Singleton Percent Low Birthweight WIC Births by District



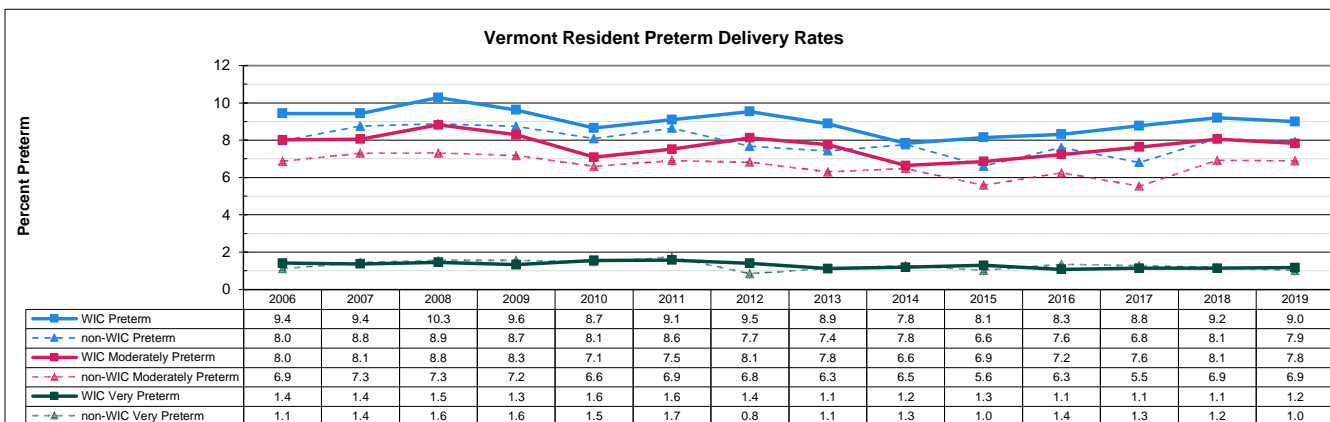
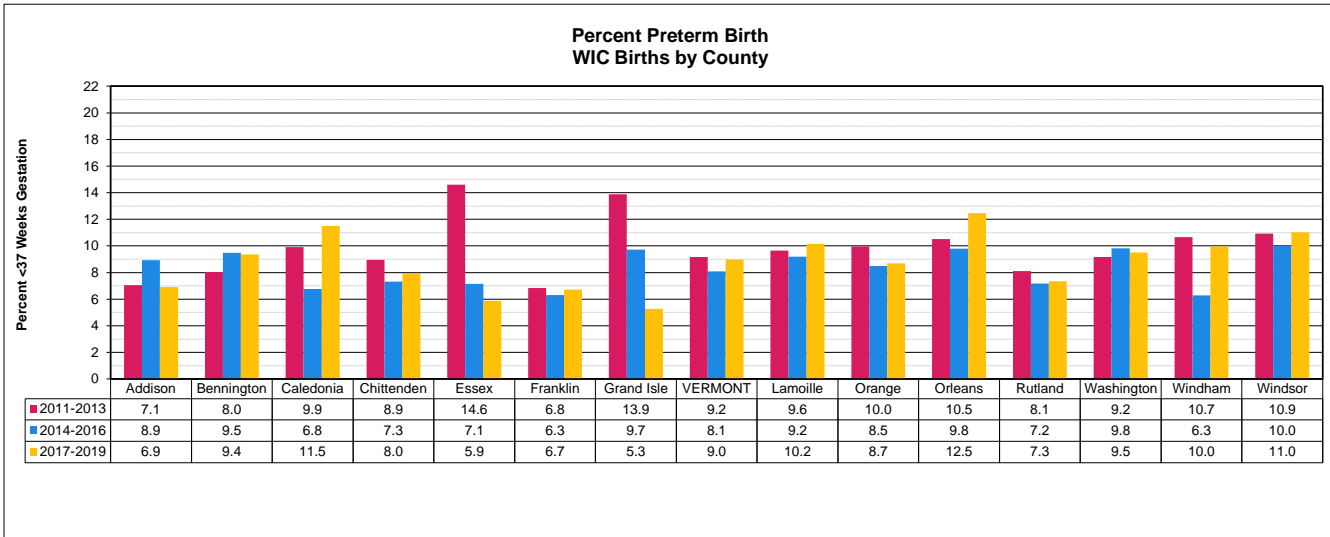
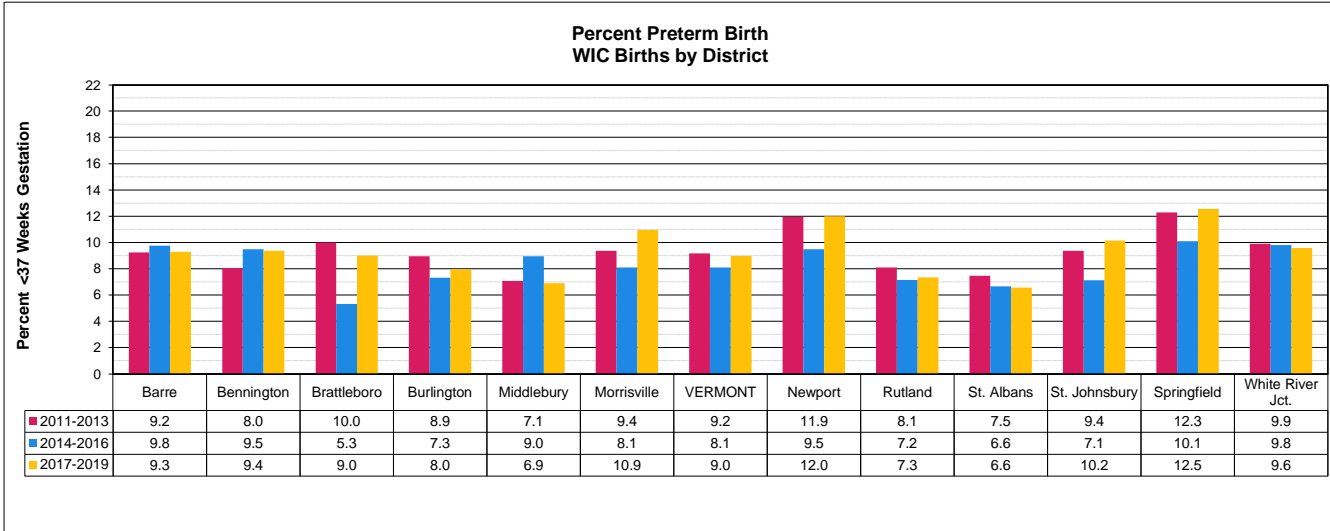
### Singleton Percent Low Birthweight WIC Births by County



### Vermont Resident Singleton Births Percent Low Birthweight, Very Low Birthweight

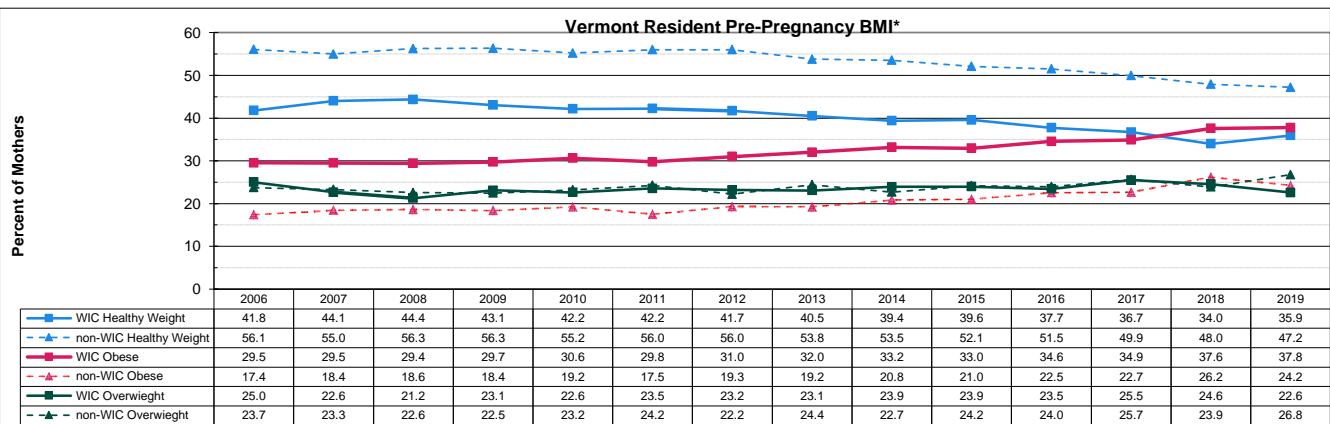
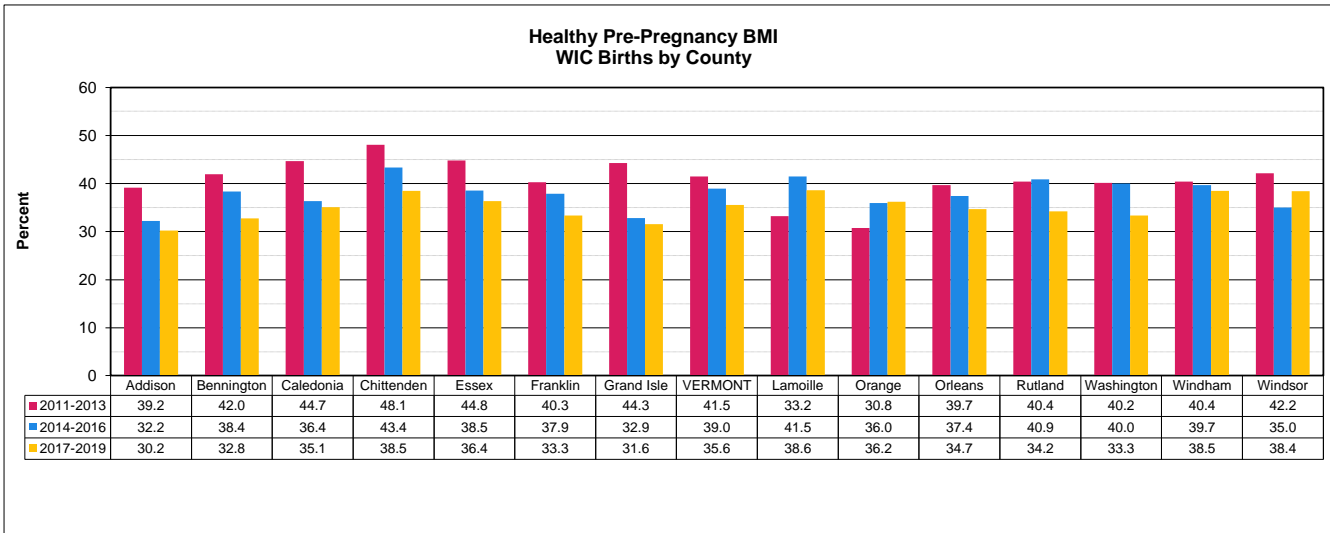
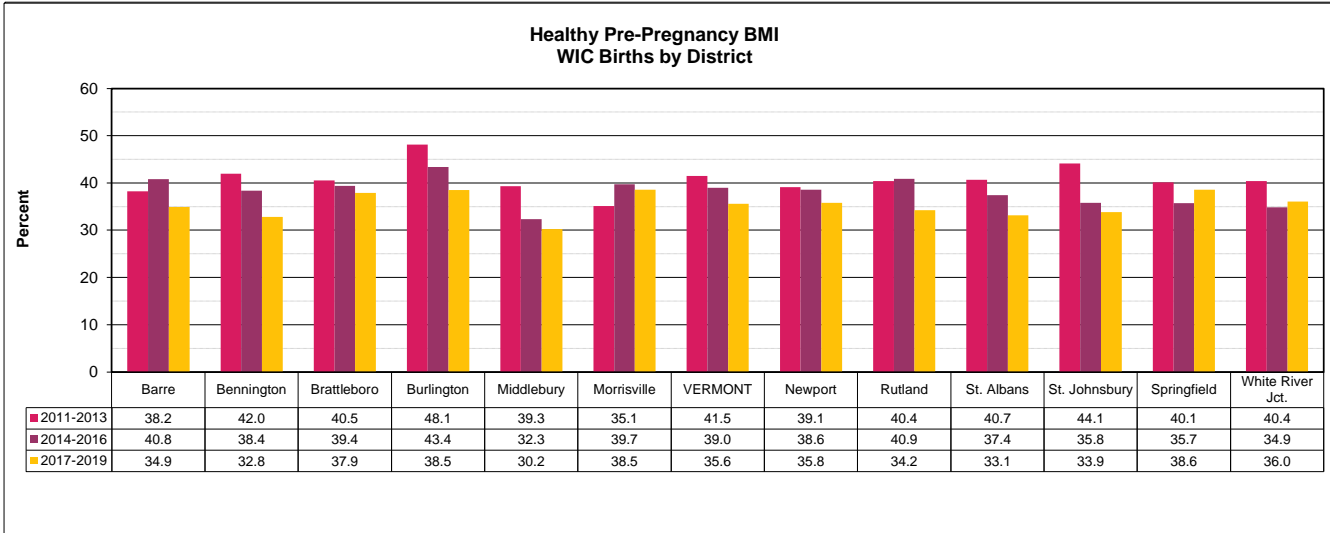


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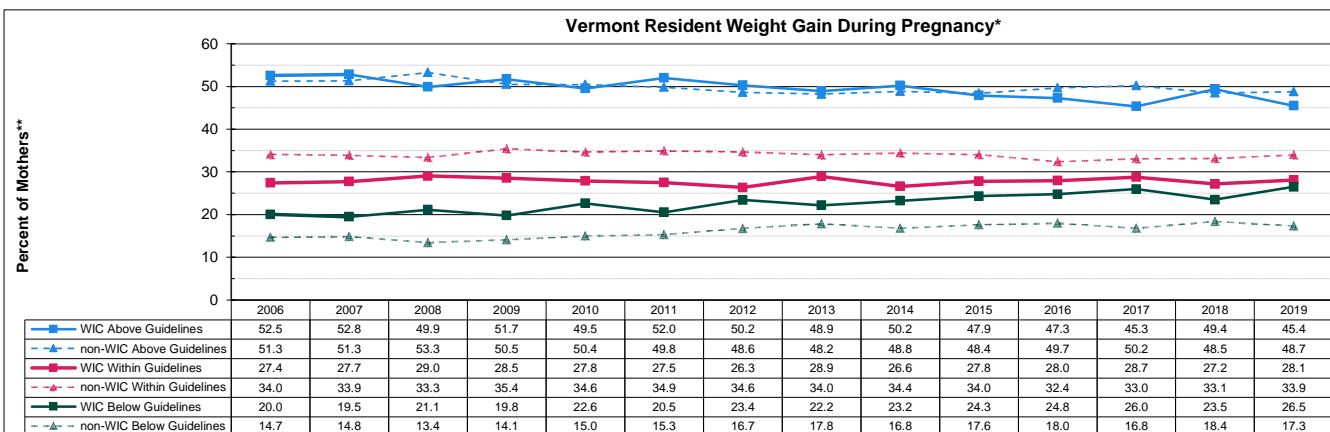
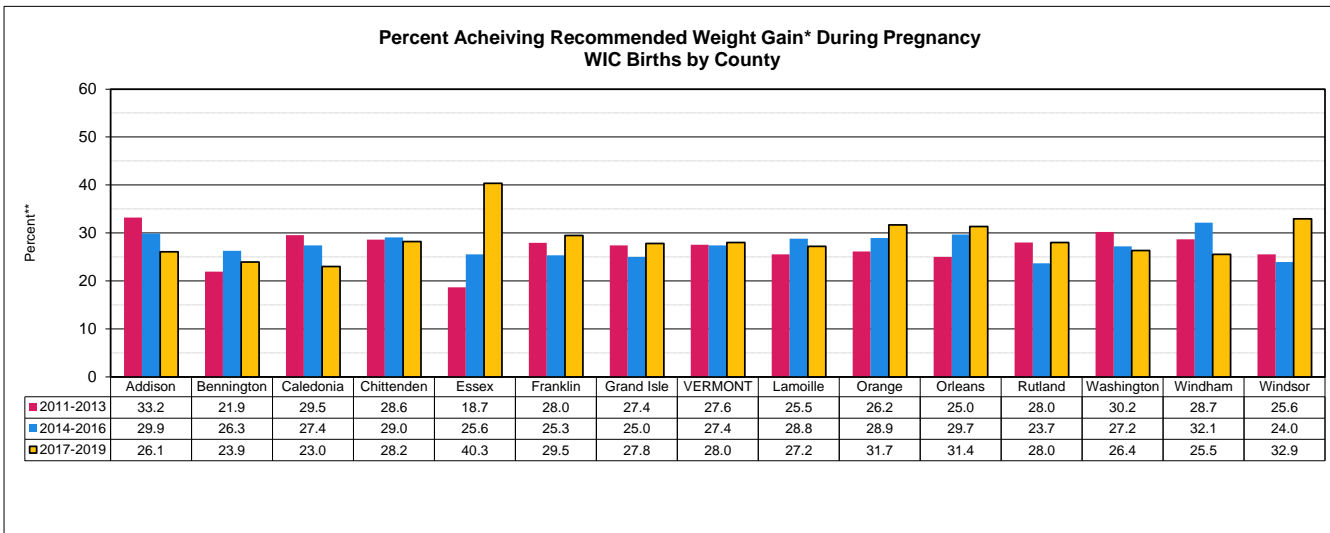
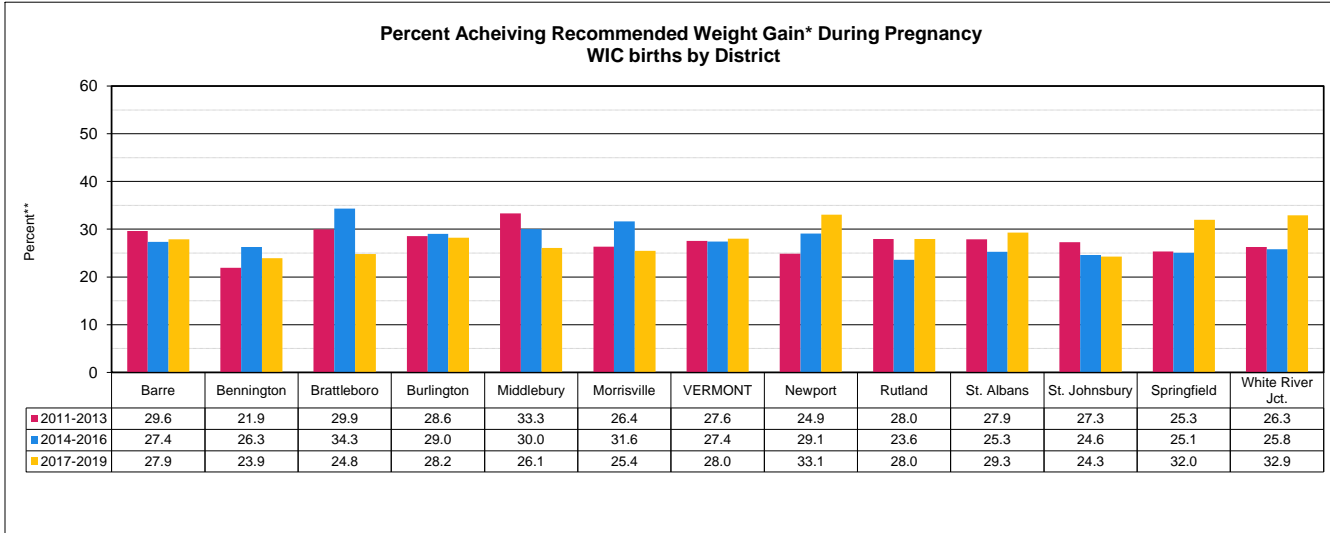
Preterm = <37 weeks gestation  
 Moderately Preterm = 32-36 weeks gestation  
 Very Preterm = <32 weeks gestation

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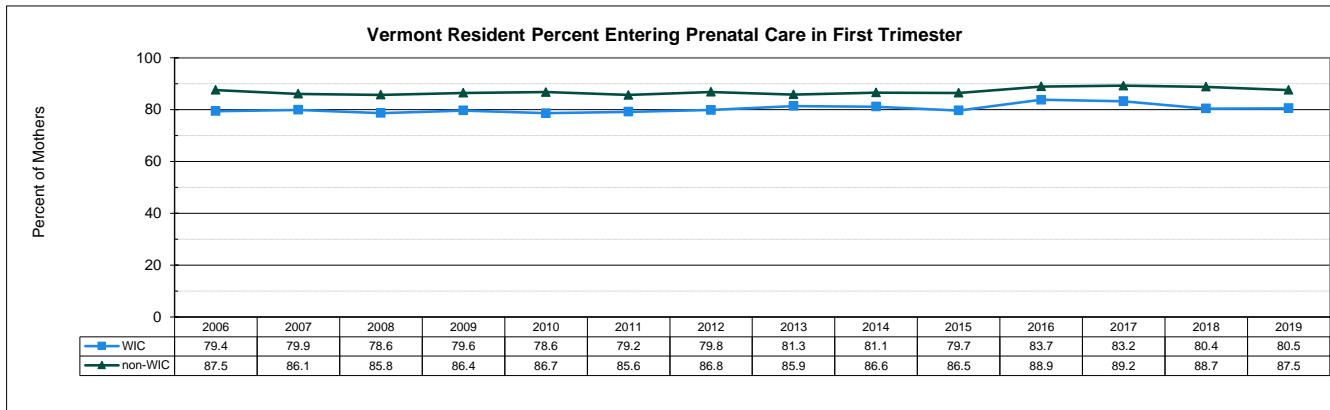
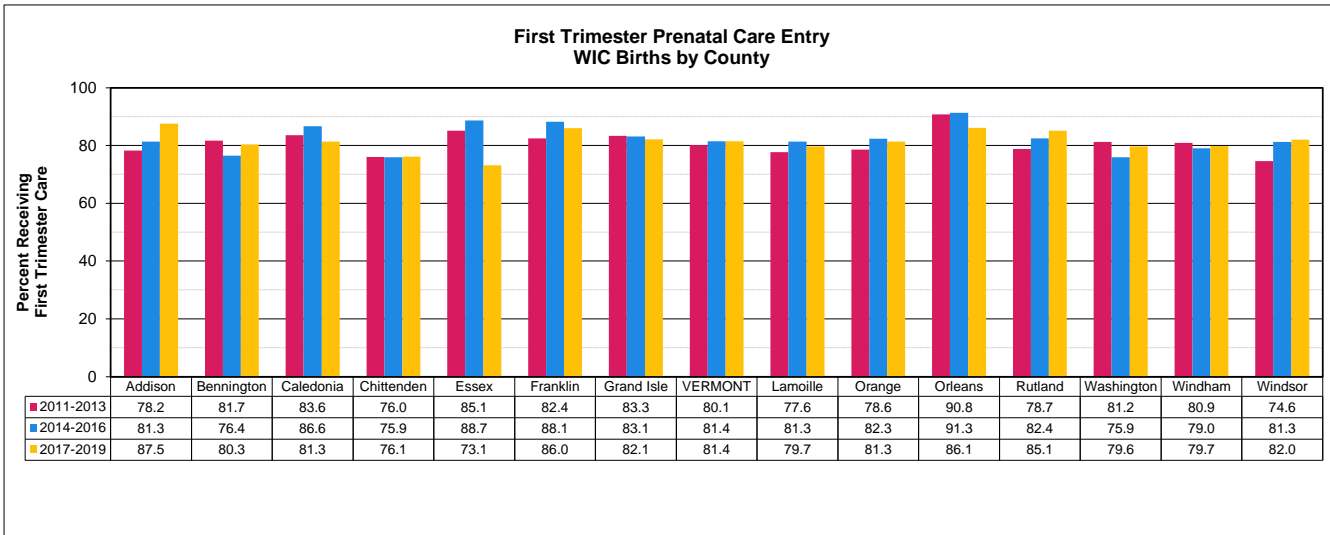
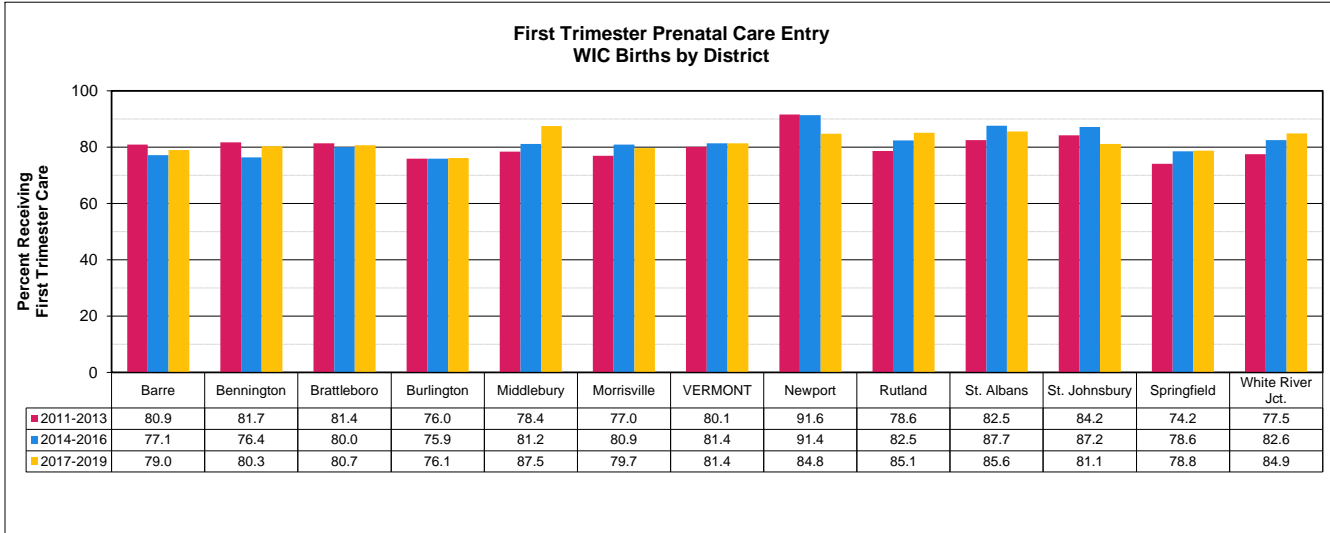
\* BMI categories defined by the Institute of Medicine.

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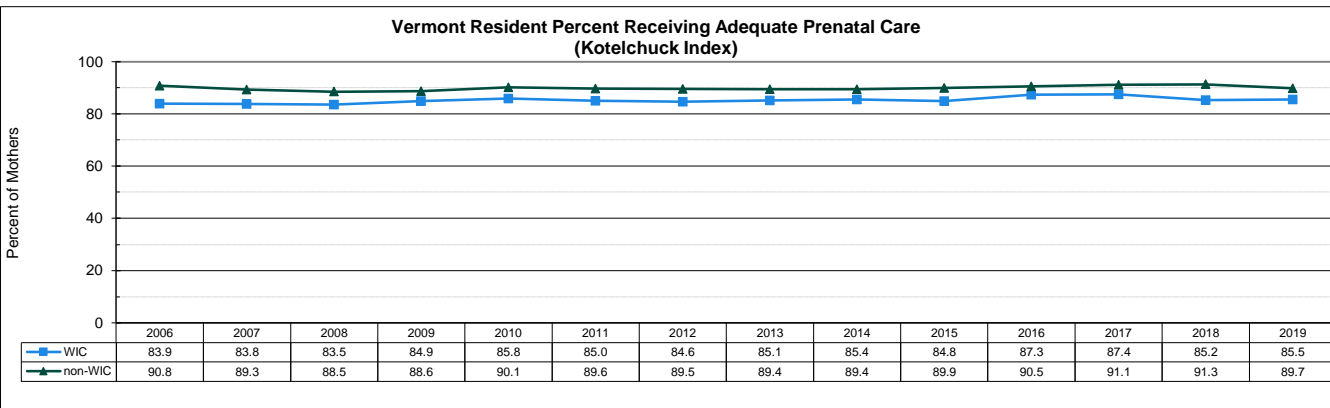
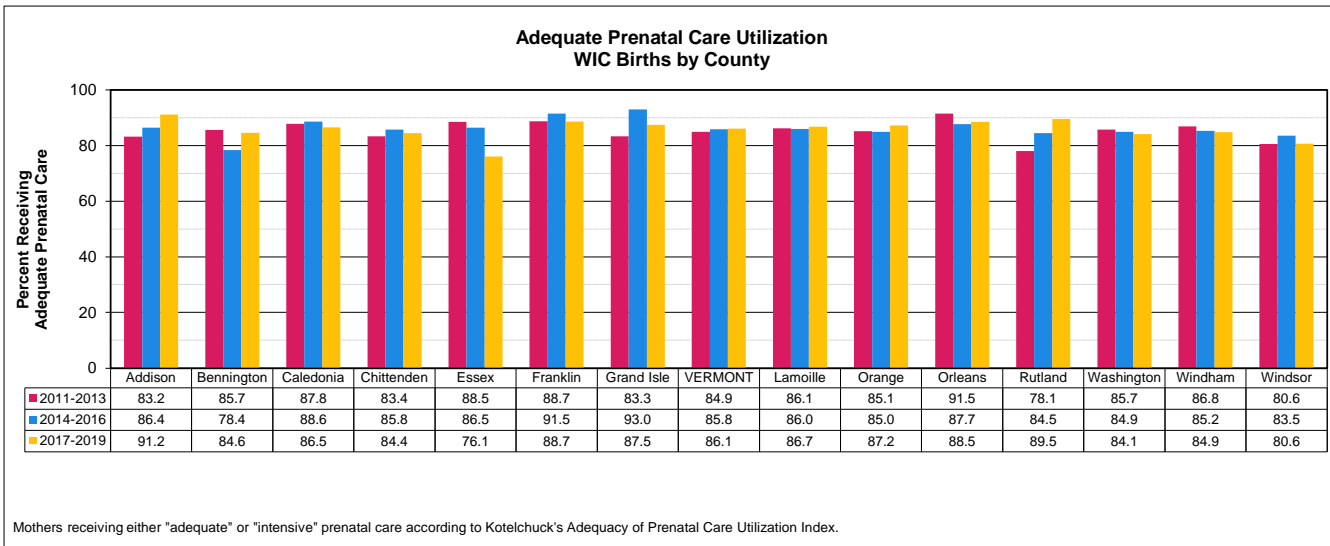
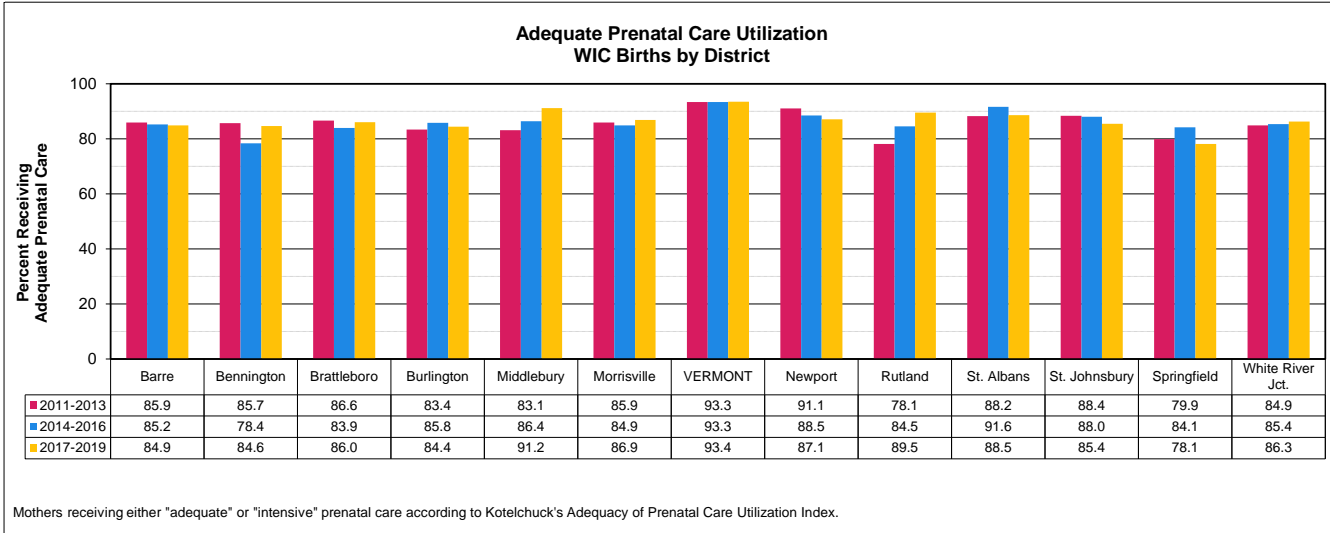
\* Weight gain recommendations defined by the Institute of Medicine.  
 \*\* Only includes women who delivered full-term singleton or twin births.

Vermont WIC - Maternal and Child Health Report - 2019

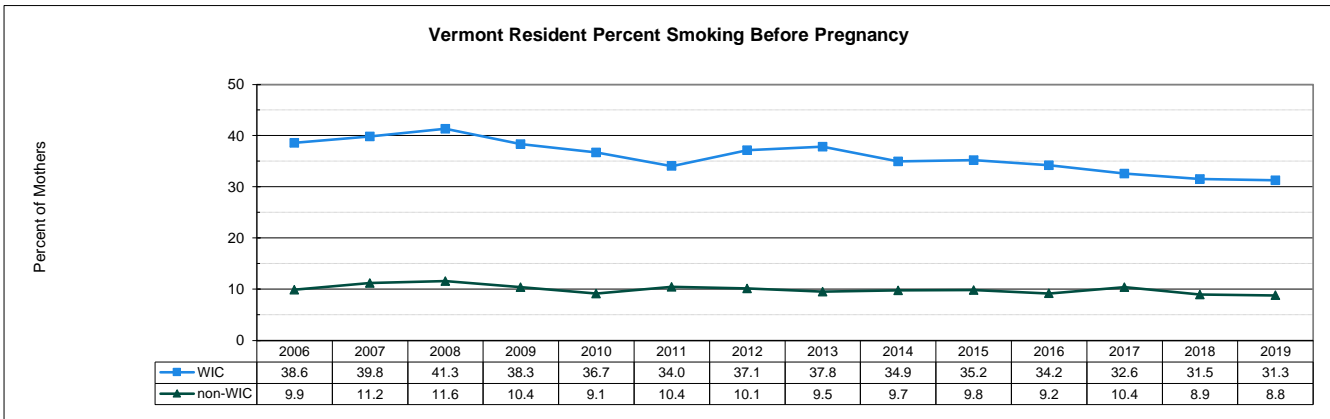
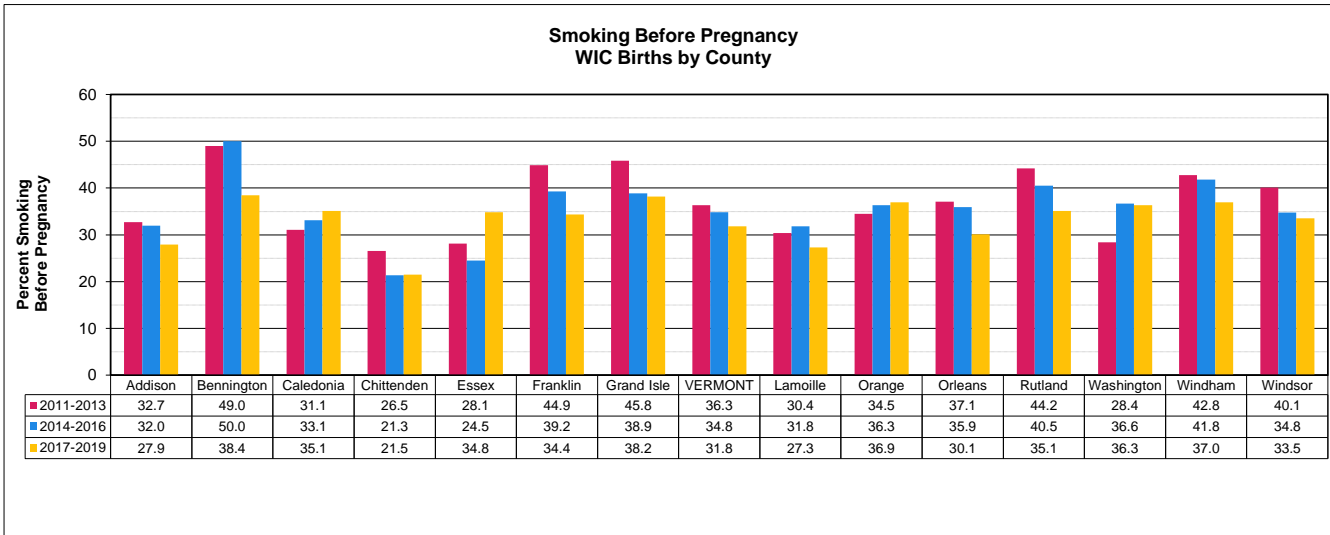
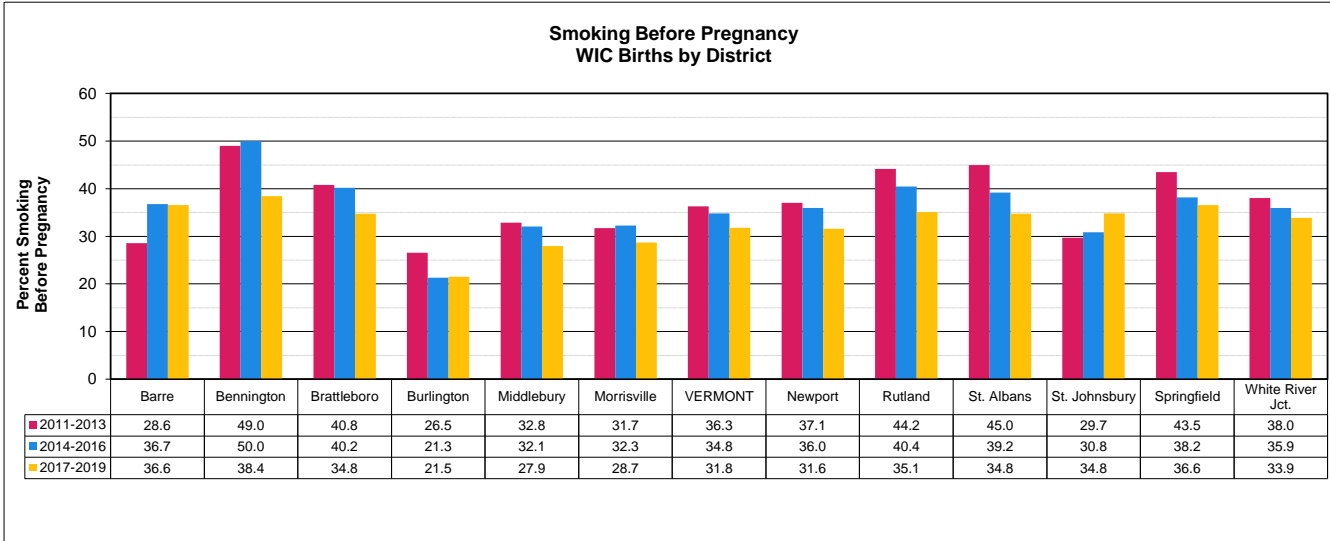




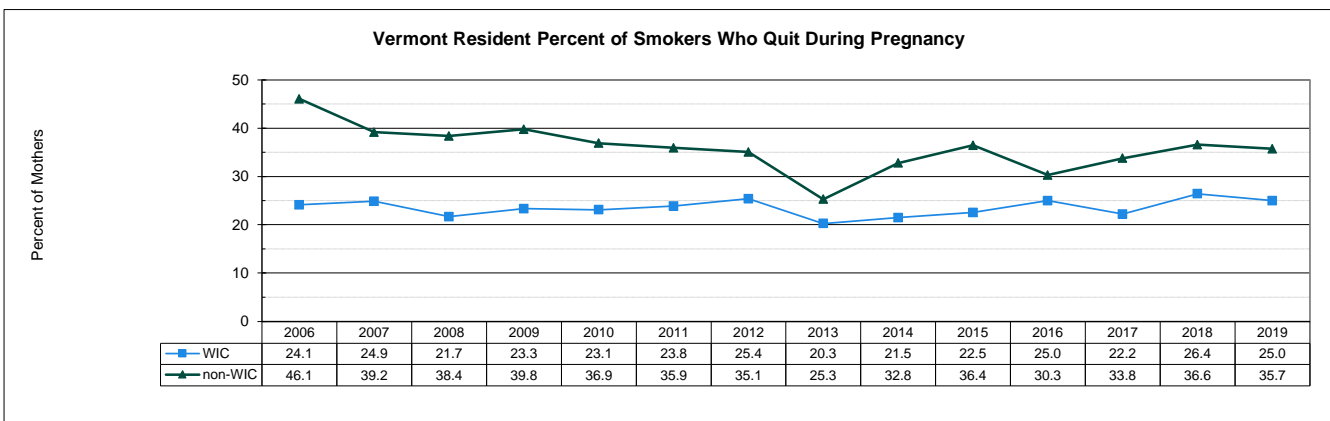
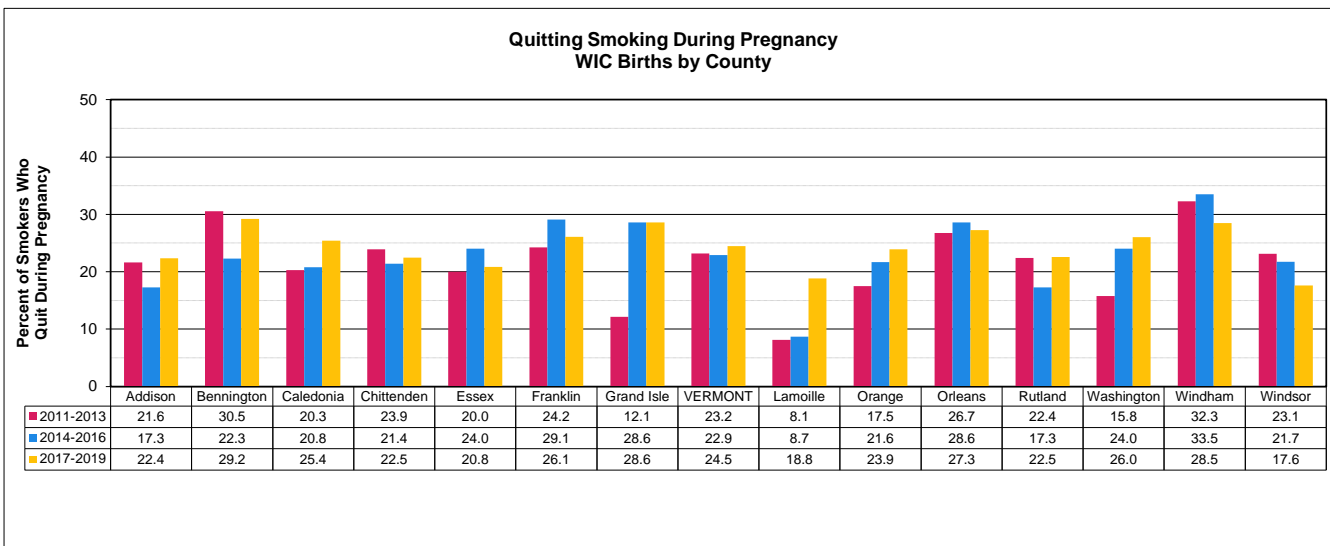
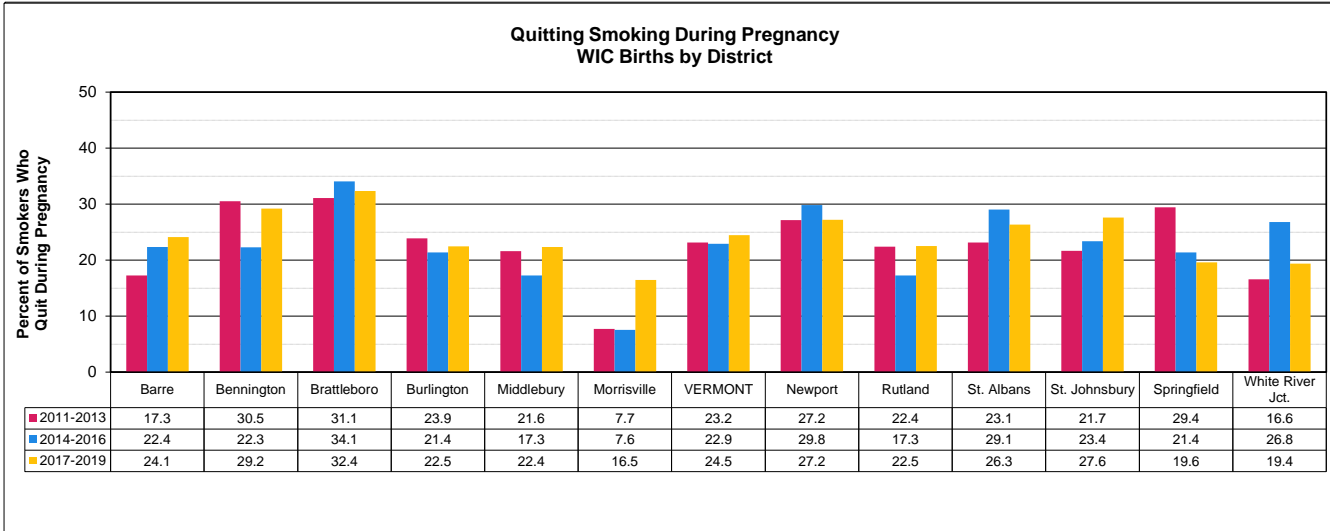
## Vermont WIC - Maternal and Child Health Report - 2019



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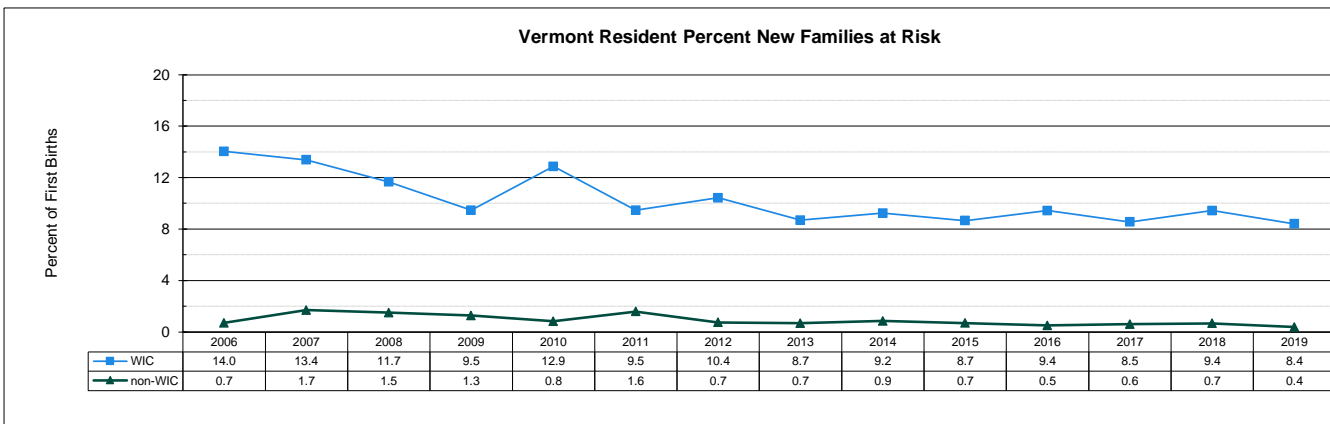
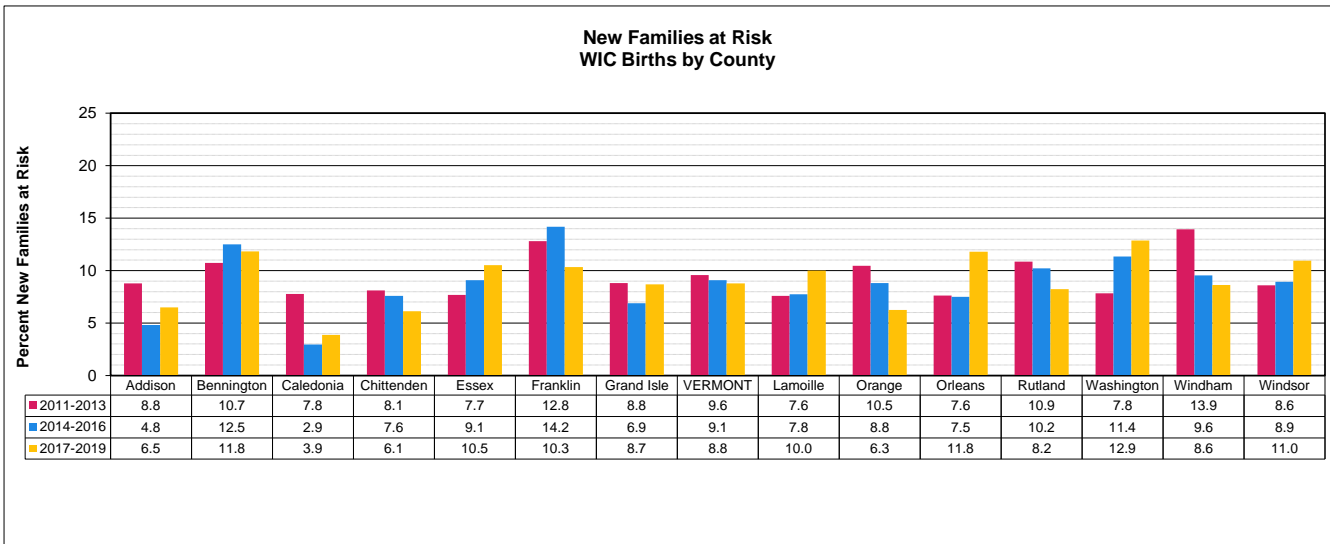
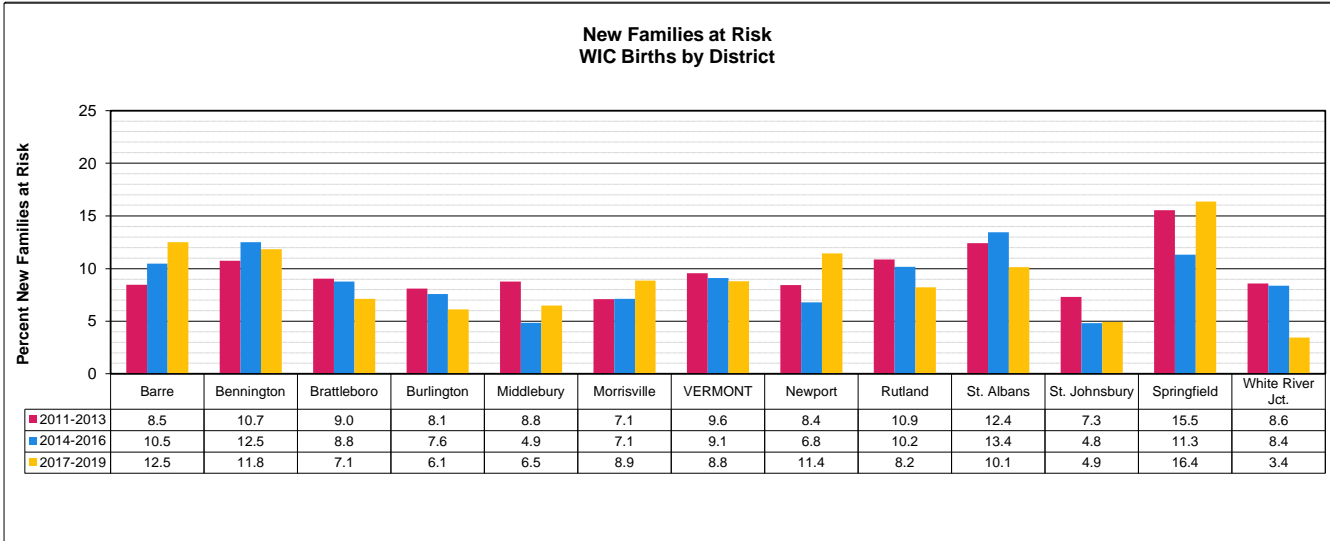
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Women were counted as smokers if they smoked before pregnancy or during the first trimester of pregnancy.

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.

## Vermont WIC - Maternal and Child Health Report - 2019



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.

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

DISTRICT	BIRTHWEIGHT												TOTAL	
	NUMBER OF EVENTS													
	<500g	500-999g	1000-1499g	1500-1999g	2000-2499g	2500-2999g	3000-3499g	3500-3999g	4000-4499g	4500-4999g	5000-5499g	5500g+		UNKNOWN
BARRE	0	1	3	12	34	99	159	138	36	2	1	0	0	485
BENNINGTON	0	2	3	7	27	79	166	124	27	3	1	0	1	440
BRATTLEBORO	0	2	4	4	25	51	99	80	38	8	0	0	0	311
BURLINGTON	3	2	4	19	48	228	360	251	92	9	3	0	0	1019
MIDDLEBURY	0	0	1	0	14	48	112	73	25	2	0	0	0	275
MORRISVILLE	0	1	5	7	20	47	130	77	29	4	0	0	0	320
NEWPORT	1	2	5	7	25	82	174	114	22	3	0	0	0	435
RUTLAND	0	3	5	6	33	111	224	154	41	7	1	0	1	586
ST. ALBANS	0	0	3	6	30	109	196	129	65	8	3	0	0	549
ST. JOHNSBURY	0	0	3	12	21	74	143	96	43	2	0	0	0	394
SPRINGFIELD	0	0	6	5	14	57	104	71	28	2	0	0	0	287
WHITE RIVER JCT	1	2	1	5	23	64	95	80	17	4	0	0	0	292
<b>TOTAL</b>	<b>5</b>	<b>15</b>	<b>43</b>	<b>90</b>	<b>314</b>	<b>1049</b>	<b>1962</b>	<b>1387</b>	<b>463</b>	<b>54</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>5393</b>

## CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
BARRE	0.0	0.2	0.8	3.3	10.3	30.7	63.5	92.0	99.4	99.8	100.0	100.0
BENNINGTON	0.0	0.5	1.1	2.7	8.9	26.9	64.7	92.9	99.1	99.8	100.0	100.0
BRATTLEBORO	0.0	0.6	1.9	3.2	11.3	27.7	59.5	85.2	97.4	100.0	100.0	100.0
BURLINGTON	0.3	0.5	0.9	2.7	7.5	29.8	65.2	89.8	98.8	99.7	100.0	100.0
MIDDLEBURY	0.0	0.0	0.4	0.4	5.5 -	22.9	63.6	90.2	99.3	100.0	100.0	100.0
MORRISVILLE	0.0	0.3	1.9	4.1	10.3	25.0	65.6	89.7	98.8	100.0	100.0	100.0
NEWPORT	0.2	0.7	1.8	3.4	9.2	28.0	68.0	94.3	99.3	100.0	100.0	100.0
RUTLAND	0.0	0.5	1.4	2.4	8.0	27.0	65.3	91.6	98.6	99.8	100.0	100.0
ST. ALBANS	0.0	0.0	0.5	1.6	7.1	27.0	62.7	86.2	98.0	99.5	100.0	100.0
ST. JOHNSBURY	0.0	0.0	0.8	3.8	9.1	27.9	64.2	88.6	99.5	100.0	100.0	100.0
SPRINGFIELD	0.0	0.0	2.1	3.8	8.7	28.6	64.8	89.5	99.3	100.0	100.0	100.0
WHITE RIVER JCT	0.3	1.0	1.4	3.1	11.0	32.9	65.4	92.8	98.6	100.0	100.0	100.0
<b>TOTAL</b>	<b>0.1</b>	<b>0.4</b>	<b>1.2</b>	<b>2.8</b>	<b>8.7</b>	<b>28.1</b>	<b>64.5</b>	<b>90.2</b>	<b>98.8</b>	<b>99.8</b>	<b>100.0</b>	<b>100.0</b>

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

DISTRICT	BIRTHWEIGHT												UNKNOWN	TOTAL
	NUMBER OF EVENTS													
	<500g	500-999g	1000-1499g	1500-1999g	2000-2499g	2500-2999g	3000-3499g	3500-3999g	4000-4499g	4500-4999g	5000-5499g	5500g+		
BARRE	0	1	0	6	26	95	158	137	36	2	1	0	0	462
BENNINGTON	0	2	0	6	22	77	164	123	27	3	1	0	1	426
BRATTLEBORO	0	2	2	0	18	45	99	79	38	8	0	0	0	291
BURLINGTON	3	0	4	13	42	223	358	250	92	9	3	0	0	997
MIDDLEBURY	0	0	1	0	8	44	112	73	25	2	0	0	0	265
MORRISVILLE	0	1	3	5	17	45	130	77	29	4	0	0	0	311
NEWPORT	1	1	2	4	22	74	174	114	22	3	0	0	0	417
RUTLAND	0	3	4	4	26	104	224	154	41	7	1	0	1	569
ST. ALBANS	0	0	2	2	23	102	195	129	65	8	3	0	0	529
ST. JOHNSBURY	0	0	3	6	21	74	143	96	43	2	0	0	0	388
SPRINGFIELD	0	0	6	2	8	57	104	71	28	2	0	0	0	278
WHITE RIVER JCT	1	2	1	3	20	55	95	80	17	4	0	0	0	278
<b>TOTAL</b>	<b>5</b>	<b>12</b>	<b>28</b>	<b>51</b>	<b>253</b>	<b>995</b>	<b>1956</b>	<b>1383</b>	<b>463</b>	<b>54</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>5211</b>

## CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
BARRE	0.0	0.2	0.2 -	1.5	7.1	27.7	61.9	91.6	99.4	99.8	100.0	100.0
BENNINGTON	0.0	0.5	0.5	1.9	7.1	25.2	63.8	92.7	99.1	99.8	100.0	100.0
BRATTLEBORO	0.0	0.7	1.4	1.4	7.6	23.0	57.0	84.2	97.3	100.0	100.0	100.0
BURLINGTON	0.3	0.3	0.7	2.0	6.2	28.6	64.5	89.6	98.8	99.7	100.0	100.0
MIDDLEBURY	0.0	0.0	0.4	0.4	3.4 -	20.0	62.3	89.8	99.2	100.0	100.0	100.0
MORRISVILLE	0.0	0.3	1.3	2.9	8.4	22.8	64.6	89.4	98.7	100.0	100.0	100.0
NEWPORT	0.2	0.5	1.0	1.9	7.2	24.9	66.7	94.0	99.3	100.0	100.0	100.0
RUTLAND	0.0	0.5	1.2	1.9	6.5	24.8	64.3	91.4	98.6	99.8	100.0	100.0
ST. ALBANS	0.0	0.0	0.4	0.8	5.1	24.4	61.2	85.6	97.9	99.4	100.0	100.0
ST. JOHNSBURY	0.0	0.0	0.8	2.3	7.7	26.8	63.7	88.4	99.5	100.0	100.0	100.0
SPRINGFIELD	0.0	0.0	2.2 +	2.9	5.8	26.3	63.7	89.2	99.3	100.0	100.0	100.0
WHITE RIVER JCT	0.4	1.1	1.4	2.5	9.7 +	29.5	63.7	92.4	98.6	100.0	100.0	100.0
<b>TOTAL</b>	<b>0.1</b>	<b>0.3</b>	<b>0.9</b>	<b>1.8</b>	<b>6.7</b>	<b>25.8</b>	<b>63.4</b>	<b>89.9</b>	<b>98.8</b>	<b>99.8</b>	<b>100.0</b>	<b>100.0</b>

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

DISTRICT	NUMBER OF EVENTS								TOTAL
	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks	Unknown Weeks	
BARRE	1	1	3	40	127	310	3	0	485
BENNINGTON	4	1	2	34	97	300	0	2	440
BRATTLEBORO	0	6	1	21	81	201	1	0	311
BURLINGTON	6	3	10	62	263	660	14	1	1019
MIDDLEBURY	0	1	1	17	78	177	1	0	275
MORRISVILLE	2	4	5	24	78	201	6	0	320
NEWPORT	3	5	5	39	115	265	2	1	435
RUTLAND	3	3	8	29	156	384	3	0	586
ST. ALBANS	0	3	10	23	108	402	2	1	549
ST. JOHNSBURY	0	4	6	30	83	268	3	0	394
SPRINGFIELD	2	4	4	26	58	193	0	0	287
WHITE RIVER JCT	3	3	2	20	83	179	2	0	292
TOTAL	24	38	57	365	1327	3540	37	5	5393

### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks
BARRE	0.2	0.4	1.0 -	9.3	35.5	99.4	100.0
BENNINGTON	0.9	1.1	1.6	9.4	31.5	100.0	100.0
BRATTLEBORO	0.0	1.9	2.3	9.0	35.0	99.7	100.0
BURLINGTON	0.6	0.9	1.9	8.0	33.8	98.6	100.0
MIDDLEBURY	0.0	0.4	0.7 -	6.9	35.3	99.6	100.0
MORRISVILLE	0.6	1.9	3.4	10.9	35.3	98.1	100.0
NEWPORT	0.7	1.8	3.0	12.0 +	38.5	99.5	100.0
RUTLAND	0.5	1.0	2.4	7.3	34.0	99.5	100.0
ST. ALBANS	0.0	0.5	2.4	6.6 -	26.3	99.6	100.0
ST. JOHNSBURY	0.0	1.0	2.5	10.2	31.2	99.2	100.0
SPRINGFIELD	0.7	2.1	3.5	12.5 +	32.8	100.0	100.0
WHITE RIVER JCT	1.0	2.1	2.7	9.6	38.0	99.3	100.0
TOTAL	0.4	1.2	2.2	9.0	33.6	99.3	100.0

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

DISTRICT	PRE-PREGNANCY BMI					TOTAL	WEIGHT GAIN DURING PREGNANCY*				
	UNDER-WEIGHT	HEALTHY WEIGHT	OVER-WEIGHT	OBESE	UNKNOWN		BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES	UNKNOWN	TOTAL
BARRE	14	164	108	184	3	473	107	120	203	3	433
BENNINGTON	10	141	101	178	3	433	106	94	193	3	396
BRATTLEBORO	12	113	68	105	3	301	64	68	142	3	277
BURLINGTON	33	379	269	303	24	1008	279	256	373	24	932
MIDDLEBURY	12	81	60	115	2	270	74	65	110	2	251
MORRISVILLE	10	121	68	115	2	316	72	72	139	2	285
NEWPORT	10	151	104	157	4	426	70	125	183	4	382
RUTLAND	21	196	137	219	5	578	114	150	272	5	541
ST. ALBANS	21	178	112	226	2	539	127	148	230	3	508
ST. JOHNSBURY	15	130	106	133	7	391	83	84	179	7	353
SPRINGFIELD	14	108	61	97	3	283	63	79	105	3	250
WHITE RIVER JCT	10	102	80	91	2	285	56	85	117	2	260
TOTAL	182	1864	1274	1923	60	5303	1215	1346	2246	61	4868

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

\* Only includes women who delivered full-term singleton or twin births.

## ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	UNDER-WEIGHT	HEALTHY WEIGHT	OVER-WEIGHT	OBESE	BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES
BARRE	3.0	34.9	23.0	39.1	24.9	27.9	47.2
BENNINGTON	2.3	32.8	23.5	41.4 +	27.0	23.9 -	49.1
BRATTLEBORO	4.0	37.9	22.8	35.2	23.4	24.8	51.8
BURLINGTON	3.4	38.5 +	27.3 +	30.8 -	30.7 +	28.2	41.1 -
MIDDLEBURY	4.5	30.2 -	22.4	42.9 +	29.7	26.1	44.2
MORRISVILLE	3.2	38.5	21.7	36.6	25.4	25.4	49.1
NEWPORT	2.4	35.8	24.6	37.2	18.5 -	33.1 +	48.4
RUTLAND	3.7	34.2	23.9	38.2	21.3 -	28.0	50.7 +
ST. ALBANS	3.9	33.1	20.9 -	42.1 +	25.1	29.3	45.5
ST. JOHNSBURY	3.9	33.9	27.6	34.6	24.0	24.3	51.7 +
SPRINGFIELD	5.0	38.6	21.8	34.6	25.5	32.0	42.5
WHITE RIVER JCT	3.5	36.0	28.3	32.2	21.7	32.9 +	45.3
TOTAL	3.5	35.6	24.3	36.7	25.3	28.0	46.7

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage



## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

### 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	NONE	UNKNOWN	TOTAL
BARRE	4	165	203	56	23	5	7	5	3	0	14	485
BENNINGTON	13	131	203	54	18	7	2	2	0	0	3	435
BRATTLEBORO	7	136	99	35	14	6	2	1	0	0	0	300
BURLINGTON	9	317	440	151	49	22	4	10	4	0	8	1014
MIDDLEBURY	1	123	114	18	6	4	3	3	0	0	2	274
MORRISVILLE	1	129	125	40	11	7	4	2	0	1	7	327
NEWPORT	22	220	120	38	13	8	1	3	1	1	7	434
RUTLAND	6	247	244	49	15	9	3	7	3	1	4	588
ST. ALBANS	8	306	150	43	13	8	6	5	1	2	0	542
ST. JOHNSBURY	3	126	185	41	16	10	4	1	1	0	77	464
SPRINGFIELD	6	124	93	28	12	7	9	2	0	2	0	283
WHITE RIVER JCT	0	117	131	19	12	9	2	1	1	0	0	292
TOTAL	80	2141	2107	572	202	102	47	42	16	7	77	5393

#### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	NONE
BARRE	0.8	35.9	79.0	90.9	95.8	96.8	98.3	99.4	100.0	100.0
BENNINGTON	3.0	33.3	80.3	92.8	97.0	98.6	99.1	99.5	100.0	100.0
BRATTLEBORO	2.3	47.7	80.7	92.3	97.0	99.0	99.7	100.0	100.0	100.0
BURLINGTON	0.9	32.4	76.1	-	91.2	96.0	98.2	98.6	99.6	100.0
MIDDLEBURY	0.4	45.6	87.5	+	94.1	96.3	97.8	98.9	100.0	100.0
MORRISVILLE	0.3	40.6	79.7		92.2	95.6	97.8	99.1	99.7	100.0
NEWPORT	5.2	56.7	84.8	+	93.7	96.7	98.6	98.8	99.5	99.8
RUTLAND	1.0	43.3	85.1	+	93.5	96.1	97.6	98.1	99.3	99.8
ST. ALBANS	1.5	57.9	85.6	+	93.5	95.9	97.4	98.5	99.4	99.6
ST. JOHNSBURY	0.8	33.3	81.1		91.7	95.9	98.4	99.5	99.7	100.0
SPRINGFIELD	2.1	45.9	78.8		88.7	92.9	95.4	98.6	99.3	99.3
WHITE RIVER JCT	0.0	40.1	84.9		91.4	95.5	98.6	99.3	99.7	100.0
TOTAL	1.5	41.8	81.4		92.2	96.0	97.9	98.8	99.6	99.9

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

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

## 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	46	25	183	215	16	485
BENNINGTON	32	34	180	183	11	440
BRATTLEBORO	24	18	74	184	11	311
BURLINGTON	96	60	411	436	16	1019
MIDDLEBURY	18	6	98	150	3	275
MORRISVILLE	27	15	176	102	0	320
NEWPORT	29	26	186	184	10	435
RUTLAND	42	19	192	330	3	586
ST. ALBANS	39	23	234	245	8	549
ST. JOHNSBURY	33	23	157	171	10	394
SPRINGFIELD	34	28	87	134	4	287
WHITE RIVER JCT	27	13	117	135	0	292
TOTAL	447	290	2095	2469	92	5393

#### ROW PERCENTS - EXCLUDING UNKNOWNNS

DISTRICT	Inadequate	Intermediate	Adequate	Intensive
BARRE	9.8	5.3	39.0	45.8
BENNINGTON	7.5	7.9	42.0	42.7
BRATTLEBORO	8.0	6.0	24.7	61.3
BURLINGTON	9.6	6.0	41.0	43.5
MIDDLEBURY	6.6	2.2	36.0	55.1
MORRISVILLE	8.4	4.7	55.0	31.9
NEWPORT	6.8	6.1	43.8	43.3
RUTLAND	7.2	3.3	32.9	56.6
ST. ALBANS	7.2	4.3	43.3	45.3
ST. JOHNSBURY	8.6	6.0	40.9	44.5
SPRINGFIELD	12.0	9.9	30.7	47.3
WHITE RIVER JCT	9.2	4.5	40.1	46.2
TOTAL	8.4	5.5	39.5	46.6

#### PERCENT WITH AT LEAST ADEQUATE CARE UTILIZATION

DISTRICT	PERCENT WITH AT LEAST ADEQUATE CARE UTILIZATION
BARRE	84.9
BENNINGTON	84.6
BRATTLEBORO	86.0
BURLINGTON	84.4
MIDDLEBURY	91.2 +
MORRISVILLE	86.9
NEWPORT	87.1
RUTLAND	89.5 +
ST. ALBANS	88.5
ST. JOHNSBURY	85.4
SPRINGFIELD	78.1 -
WHITE RIVER JCT	86.3
TOTAL	86.1

+ significantly higher than state percentage  
- significantly lower than state percentage

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

## 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 <sup>^</sup>	Quit <sup>^*</sup>
BARRE	174	302	9	485	174	42
BENNINGTON	163	261	16	440	161	47
BRATTLEBORO	104	195	12	311	105	34
BURLINGTON	216	788	15	1019	218	49
MIDDLEBURY	76	196	3	275	76	17
MORRISVILLE	91	226	3	320	91	15
NEWPORT	135	292	8	435	136	37
RUTLAND	204	377	5	586	204	46
ST. ALBANS	186	349	14	549	186	49
ST. JOHNSBURY	134	251	9	394	134	37
SPRINGFIELD	102	177	8	287	102	20
WHITE RIVER JCT	98	191	3	292	98	19
TOTAL	1683	3605	105	5393	1685	412

### PERCENTAGES

DISTRICT	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	DISTRICT	Percent of Smokers Who Quit <sup>^*</sup>
BARRE	36.6 +	63.4	BARRE	24.1
BENNINGTON	38.4 +	61.6	BENNINGTON	29.2
BRATTLEBORO	34.8	65.2	BRATTLEBORO	32.4 +
BURLINGTON	21.5 -	78.5	BURLINGTON	22.5
MIDDLEBURY	27.9	72.1	MIDDLEBURY	22.4
MORRISVILLE	28.7	71.3	MORRISVILLE	16.5 -
NEWPORT	31.6	68.4	NEWPORT	27.2
RUTLAND	35.1	64.9	RUTLAND	22.5
ST. ALBANS	34.8	65.2	ST. ALBANS	26.3
ST. JOHNSBURY	34.8	65.2	ST. JOHNSBURY	27.6
SPRINGFIELD	36.6	63.4	SPRINGFIELD	19.6
WHITE RIVER JCT	33.9	66.1	WHITE RIVER JCT	19.4
TOTAL	31.8	68.2	TOTAL	24.5

+ significantly higher than state percentage  
 - significantly lower than state percentage

+ significantly higher than state percentage  
 - 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.

## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

DISTRICT	AGE OF MOTHER										TOTAL
	NUMBER OF EVENTS										
	<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	
BARRE	0	8	35	131	157	92	48	14	0	0	485
BENNINGTON	0	5	40	127	138	85	37	8	0	0	440
BRATTLEBORO	0	3	19	76	95	74	40	4	0	0	311
BURLINGTON	0	10	48	243	324	246	113	30	5	0	1019
MIDDLEBURY	0	4	16	81	91	56	19	8	0	0	275
MORRISVILLE	0	9	23	80	98	66	37	6	1	0	320
NEWPORT	1	14	32	139	161	61	23	4	0	0	435
RUTLAND	0	13	35	145	205	131	46	11	0	0	586
ST. ALBANS	0	7	52	186	159	103	41	1	0	0	549
ST. JOHNSBURY	0	2	20	129	124	86	31	2	0	0	394
SPRINGFIELD	0	7	26	77	85	62	26	4	0	0	287
WHITE RIVER JCT	0	2	14	96	84	66	22	8	0	0	292
<b>TOTAL</b>	<b>1</b>	<b>84</b>	<b>360</b>	<b>1510</b>	<b>1721</b>	<b>1128</b>	<b>483</b>	<b>100</b>	<b>6</b>	<b>0</b>	<b>5393</b>

DISTRICT	ROW PERCENTS										TOTAL
	<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	
BARRE	0.0	1.6	7.2	27.0	32.4	19.0	9.9	2.9	0.0	0.0	100.0
BENNINGTON	0.0	1.1	9.1 +	28.9	31.4	19.3	8.4	1.8	0.0	0.0	100.0
BRATTLEBORO	0.0	1.0	6.1	24.4	30.5	23.8	12.9	1.3	0.0	0.0	100.0
BURLINGTON	0.0	1.0	4.7 -	23.8	31.8	24.1	11.1	2.9	0.5	0.0	100.0
MIDDLEBURY	0.0	1.5	5.8	29.5	33.1	20.4	6.9	2.9	0.0	0.0	100.0
MORRISVILLE	0.0	2.8	7.2	25.0	30.6	20.6	11.6	1.9	0.3	0.0	100.0
NEWPORT	0.2	3.2 +	7.4	32.0	37.0	14.0	5.3	0.9	0.0	0.0	100.0
RUTLAND	0.0	2.2	6.0	24.7	35.0	22.4	7.8	1.9	0.0	0.0	100.0
ST. ALBANS	0.0	1.3	9.5 +	33.9	29.0	18.8	7.5	0.2	0.0	0.0	100.0
ST. JOHNSBURY	0.0	0.5 -	5.1	32.7	31.5	21.8	7.9	0.5	0.0	0.0	100.0
SPRINGFIELD	0.0	2.4	9.1	26.8	29.6	21.6	9.1	1.4	0.0	0.0	100.0
WHITE RIVER JCT	0.0	0.7	4.8	32.9	28.8	22.6	7.5	2.7	0.0	0.0	100.0
<b>TOTAL</b>	<b>0.0</b>	<b>1.6</b>	<b>6.7</b>	<b>28.0</b>	<b>31.9</b>	<b>20.9</b>	<b>9.0</b>	<b>1.9</b>	<b>0.1</b>	<b>0.0</b>	<b>100.0</b>

+ significantly higher than state percentage (95% confidence level); - significantly lower than state percentage

## Vermont WIC - Maternal and Child Health Report - 2019

New Families at Risk by District

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

2017-2019

District	First Births	Number to Women <20, Unmarried, < HS Education	Percent
Barre	176	22	12.5%
Bennington	152	18	11.8%
Brattleboro	112	8	7.1%
Burlington	359	22	6.1% -
Middlebury	108	7	6.5%
Morrisville	124	11	8.9%
Newport	166	19	11.4%
Rutland	219	18	8.2%
St. Albans	207	21	10.1%
St. Johnsbury	142	7	4.9% -
Springfield	110	18	16.4% +
White River Jct.	116	4	3.4% -
Vermont	1991	175	8.8%

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

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# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

COUNTY OF RESIDENCE	BIRTHWEIGHT												TOTAL	
	NUMBER OF EVENTS													
	<500g	500-999g	1000-1499g	1500-1999g	2000-2499g	2500-2999g	3000-3499g	3500-3999g	4000-4499g	4500-4999g	5000-5499g	5500g+		UNKNOWN
ADDISON	0	0	1	0	14	48	112	73	25	2	0	0	0	275
BENNINGTON	0	2	3	7	27	79	166	124	27	3	1	0	1	440
CALEDONIA	0	0	4	13	24	65	141	78	37	3	0	0	0	365
CHITTENDEN	3	2	4	19	48	228	360	251	92	9	3	0	0	1019
ESSEX	0	0	0	0	3	14	28	20	3	0	0	0	0	68
FRANKLIN	0	0	3	6	27	97	174	119	57	6	3	0	0	492
GRAND ISLE	0	0	0	0	3	12	22	10	8	2	0	0	0	57
LAMOILLE	0	1	4	3	15	39	99	65	28	2	0	0	0	256
ORANGE	0	1	0	9	17	57	77	75	15	2	0	0	0	253
ORLEANS	1	2	5	7	23	76	164	106	22	4	0	0	0	410
RUTLAND	0	3	5	6	33	111	224	154	41	7	1	0	1	586
WASHINGTON	0	1	3	7	28	84	136	117	31	2	1	0	0	410
WINDHAM	0	2	5	7	30	63	126	97	42	9	0	0	0	381
WINDSOR	1	1	6	6	22	76	133	98	35	3	0	0	0	381
TOTAL	5	15	43	90	314	1049	1962	1387	463	54	9	0	2	5393

## CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY OF RESIDENCE	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
ADDISON	0.0	0.0	0.4	0.4	5.5 -	22.9	63.6	90.2	99.3	100.0	100.0	100.0
BENNINGTON	0.0	0.5	1.1	2.7	8.9	26.9	64.7	92.9	99.1	99.8	100.0	100.0
CALEDONIA	0.0	0.0	1.1	4.7	11.2	29.0	67.7	89.0	99.2	100.0	100.0	100.0
CHITTENDEN	0.3	0.5	0.9	2.7	7.5	29.8	65.2	89.8	98.8	99.7	100.0	100.0
ESSEX	0.0	0.0	0.0 -	0.0	4.4	25.0	66.2	95.6	100.0	100.0	100.0	100.0
FRANKLIN	0.0	0.0	0.6	1.8	7.3	27.0	62.4	86.6	98.2	99.4	100.0	100.0
GRAND ISLE	0.0	0.0	0.0	0.0	5.3	26.3	64.9	82.5	96.5	100.0	100.0	100.0
LAMOILLE	0.0	0.4	2.0	3.1	9.0	24.2	62.9	88.3	99.2	100.0	100.0	100.0
ORANGE	0.0	0.4	0.4	4.0	10.7	33.2	63.6	93.3	99.2	100.0	100.0	100.0
ORLEANS	0.2	0.7	2.0	3.7	9.3	27.8	67.8	93.7	99.0	100.0	100.0	100.0
RUTLAND	0.0	0.5	1.4	2.4	8.0	27.0	65.3	91.6	98.6	99.8	100.0	100.0
WASHINGTON	0.0	0.2	1.0	2.7	9.5	30.0	63.2	91.7	99.3	99.8	100.0	100.0
WINDHAM	0.0	0.5	1.8	3.7	11.5 +	28.1	61.2	86.6	97.6	100.0	100.0	100.0
WINDSOR	0.3	0.5	2.1	3.7	9.4	29.4	64.3	90.0	99.2	100.0	100.0	100.0
TOTAL	0.1	0.4	1.2	2.8	8.7	28.1	64.5	90.2	98.8	99.8	100.0	100.0

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

COUNTY OF RESIDENCE	BIRTHWEIGHT												UNKNOWN	TOTAL
	NUMBER OF EVENTS													
	<500g	500-999g	1000-1499g	1500-1999g	2000-2499g	2500-2999g	3000-3499g	3500-3999g	4000-4499g	4500-4999g	5000-5499g	5500g+		
ADDISON	0	0	1	0	8	44	112	73	25	2	0	0	0	265
BENNINGTON	0	2	0	6	22	77	164	123	27	3	1	0	1	426
CALEDONIA	0	0	4	8	23	65	141	78	37	3	0	0	0	359
CHITTENDEN	3	0	4	13	42	223	358	250	92	9	3	0	0	997
ESSEX	0	0	0	0	1	14	28	20	3	0	0	0	0	66
FRANKLIN	0	0	2	2	20	90	173	119	57	6	3	0	0	472
GRAND ISLE	0	0	0	0	3	12	22	10	8	2	0	0	0	57
LAMOILLE	0	1	2	2	13	37	99	65	28	2	0	0	0	249
ORANGE	0	1	0	4	13	48	77	74	15	2	0	0	0	234
ORLEANS	1	1	2	4	22	68	164	106	22	4	0	0	0	394
RUTLAND	0	3	4	4	26	104	224	154	41	7	1	0	1	569
WASHINGTON	0	1	0	4	22	81	135	117	31	2	1	0	0	394
WINDHAM	0	2	3	1	21	57	126	96	42	9	0	0	0	357
WINDSOR	1	1	6	3	17	75	133	98	35	3	0	0	0	372
TOTAL	5	12	28	51	253	995	1956	1383	463	54	9	0	2	5211

## CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY OF RESIDENCE	<500g	<1000g	<1500g	<2000g	<2500g	<3000g	<3500g	<4000g	<4500g	<5000g	<5500g	5500g+
ADDISON	0.0	0.0	0.4	0.4	3.4	-	20.0	62.3	89.8	99.2	100.0	100.0
BENNINGTON	0.0	0.5	0.5	1.9	7.1		25.2	63.8	92.7	99.1	99.8	100.0
CALEDONIA	0.0	0.0	1.1	3.3	9.7	+	27.9	67.1	88.9	99.2	100.0	100.0
CHITTENDEN	0.3	0.3	0.7	2.0	6.2		28.6	64.5	89.6	98.8	99.7	100.0
ESSEX	0.0	0.0	0.0	0.0	1.5	-	22.7	65.2	95.5	100.0	100.0	100.0
FRANKLIN	0.0	0.0	0.4	0.8	5.1		24.2	60.8	86.0	98.1	99.4	100.0
GRAND ISLE	0.0	0.0	0.0	0.0	5.3		26.3	64.9	82.5	96.5	100.0	100.0
LAMOILLE	0.0	0.4	1.2	2.0	7.2		22.1	61.8	88.0	99.2	100.0	100.0
ORANGE	0.0	0.4	0.4	2.1	7.7		28.2	61.1	92.7	99.1	100.0	100.0
ORLEANS	0.3	0.5	1.0	2.0	7.6		24.9	66.5	93.4	99.0	100.0	100.0
RUTLAND	0.0	0.5	1.2	1.9	6.5		24.8	64.3	91.4	98.6	99.8	100.0
WASHINGTON	0.0	0.3	0.3	1.3	6.9		27.4	61.7	91.4	99.2	99.7	100.0
WINDHAM	0.0	0.6	1.4	1.7	7.6		23.5	58.8	85.7	97.5	100.0	100.0
WINDSOR	0.3	0.5	2.2	3.0	7.5		27.7	63.4	89.8	99.2	100.0	100.0
TOTAL	0.1	0.3	0.9	1.8	6.7		25.8	63.4	89.9	98.8	99.8	100.0

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

COUNTY OF RESIDENCE	NUMBER OF EVENTS								TOTAL
	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks	Unknown Weeks	
ADDISON	0	1	1	17	78	177	1	0	275
BENNINGTON	4	1	2	34	97	300	0	2	440
CALEDONIA	0	6	5	31	79	241	3	0	365
CHITTENDEN	6	3	10	62	263	660	14	1	1019
ESSEX	0	0	0	4	19	45	0	0	68
FRANKLIN	0	3	9	21	95	362	1	1	492
GRAND ISLE	0	0	1	2	13	40	1	0	57
LAMOILLE	2	2	4	18	64	160	6	0	256
ORANGE	1	1	4	16	70	159	2	0	253
ORLEANS	3	5	5	38	106	250	2	1	410
RUTLAND	3	3	8	29	156	384	3	0	586
WASHINGTON	1	1	1	36	106	262	3	0	410
WINDHAM	0	7	2	29	96	246	1	0	381
WINDSOR	4	5	5	28	85	254	0	0	381
TOTAL	24	38	57	365	1327	3540	37	5	5393

### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY OF RESIDENCE	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-38 Weeks	39-41 Weeks	42+ Weeks
ADDISON	0.0	0.4	0.7 -	6.9	35.3	99.6	100.0
BENNINGTON	0.9	1.1	1.6	9.4	31.5	100.0	100.0
CALEDONIA	0.0	1.6	3.0	11.5	33.2	99.2	100.0
CHITTENDEN	0.6	0.9	1.9	8.0	33.8	98.6	100.0
ESSEX	0.0	0.0	0.0 -	5.9	33.8	100.0	100.0
FRANKLIN	0.0	0.6	2.4	6.7 -	26.1	99.8	100.0
GRAND ISLE	0.0	0.0	1.8	5.3	28.1	98.2	100.0
LAMOILLE	0.8	1.6	3.1	10.2	35.2	97.7	100.0
ORANGE	0.4	0.8	2.4	8.7	36.4	99.2	100.0
ORLEANS	0.7	2.0	3.2	12.5 +	38.4	99.5	100.0
RUTLAND	0.5	1.0	2.4	7.3	34.0	99.5	100.0
WASHINGTON	0.2	0.5	0.7 -	9.5	35.4	99.3	100.0
WINDHAM	0.0	1.8	2.4	10.0	35.2	99.7	100.0
WINDSOR	1.0	2.4	3.7 +	11.0	33.3	100.0	100.0
TOTAL	0.4	1.2	2.2	9.0	33.6	99.3	100.0

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage



# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

COUNTY	PRE-PREGNANCY BMI						WEIGHT GAIN DURING PREGNANCY*				
	UNDER-WEIGHT	HEALTHY WEIGHT	OVER-WEIGHT	OBESE	UNKNOWN	TOTAL	BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES	UNKNOWN	TOTAL
ADDISON	12	81	60	115	2	270	74	65	110	2	251
BENNINGTON	10	141	101	178	3	433	106	94	193	3	396
CALEDONIA	11	125	101	119	6	362	82	73	162	6	323
CHITTENDEN	33	379	269	303	24	1008	279	256	373	24	932
ESSEX	3	24	19	20	1	67	16	25	21	1	63
FRANKLIN	19	160	98	203	2	482	111	133	207	3	454
GRAND ISLE	2	18	14	23	0	57	16	15	23	0	54
LAMOILLE	9	97	54	91	2	253	52	62	114	2	230
ORANGE	8	88	58	89	0	243	51	71	102	0	224
ORLEANS	10	138	98	152	4	402	68	111	175	4	358
RUTLAND	21	196	137	219	5	578	114	150	272	5	541
WASHINGTON	13	133	92	161	3	402	88	96	180	3	367
WINDHAM	14	141	86	125	3	369	81	85	167	3	336
WINDSOR	17	143	87	125	5	377	77	110	147	5	339
TOTAL	182	1864	1274	1923	60	5303	1215	1346	2246	61	4868

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

\* Only includes women who delivered full-term singleton or twin births.

## ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY	UNDER-WEIGHT	HEALTHY WEIGHT	OVER-WEIGHT	OBESE	BELOW GUIDELINES	WITHIN GUIDELINES	ABOVE GUIDELINES
ADDISON	4.5	30.2 -	22.4 -	42.9	29.7	26.1	44.2
BENNINGTON	2.3	32.8	23.5	41.4	27.0	23.9 -	49.1
CALEDONIA	3.1	35.1	28.4	33.4 -	25.9	23.0 -	51.1
CHITTENDEN	3.4	38.5 +	27.3 +	30.8 -	30.7 +	28.2	41.1 -
ESSEX	4.5	36.4	28.8	30.3	25.8	40.3 +	33.9 -
FRANKLIN	4.0	33.3	20.4	42.3 +	24.6	29.5	45.9
GRAND ISLE	3.5	31.6	24.6	40.4	29.6	27.8	42.6
LAMOILLE	3.6	38.6	21.5	36.3	22.8	27.2	50.0
ORANGE	3.3	36.2	23.9	36.6	22.8	31.7	45.5
ORLEANS	2.5	34.7	24.6	38.2	19.2 -	31.4	49.4
RUTLAND	3.7	34.2	23.9	38.2	21.3 -	28.0	50.7 +
WASHINGTON	3.3	33.3	23.1	40.4	24.2	26.4	49.5
WINDHAM	3.8	38.5	23.5	34.2	24.3	25.5	50.2
WINDSOR	4.6	38.4	23.4	33.6	23.1	32.9 +	44.0
TOTAL	3.5	35.6	24.3	36.7	25.3	28.0	46.7

- significantly lower than state percentage (95% confidence level); + significantly higher than state percentage

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

## 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	SIXTH	SEVENTH	EIGHTH	NINTH	NONE	UNKNOWN	TOTAL
ADDISON	1	123	114	18	6	4	3	3	0	0	3	275
BENNINGTON	13	131	203	54	18	7	2	2	2	0	8	440
CALEDONIA	3	116	173	39	13	9	4	1	1	0	6	365
CHITTENDEN	9	317	440	151	49	22	4	10	4	0	13	1019
ESSEX	4	17	28	10	3	2	1	1	1	0	1	68
FRANKLIN	8	276	134	36	11	8	5	5	1	2	6	492
GRAND ISLE	0	30	16	7	2	0	1	0	0	0	1	57
LAMOILLE	1	109	94	32	10	5	3	1	0	1	0	256
ORANGE	1	83	120	26	6	8	3	2	2	0	2	253
ORLEANS	18	216	112	33	12	7	1	2	0	1	8	410
RUTLAND	6	247	244	49	15	9	3	7	3	1	2	586
WASHINGTON	3	141	173	43	21	5	6	5	1	0	12	410
WINDHAM	9	169	117	43	16	8	7	1	0	0	11	381
WINDSOR	4	166	139	31	20	8	4	2	1	2	4	381
TOTAL	80	2141	2107	572	202	102	47	42	16	7	77	5393

### CUMULATIVE ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY OF RESIDENCE	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	NONE
ADDISON	0.4	45.6	87.5 +	94.1	96.3	97.8	98.9	100.0	100.0	100.0
BENNINGTON	3.0	33.3	80.3	92.8	97.0	98.6	99.1	99.5	100.0	100.0
CALEDONIA	0.8	33.1	81.3	92.2	95.8	98.3	99.4	99.7	100.0	100.0
CHITTENDEN	0.9	32.4	76.1 -	91.2	96.0	98.2	98.6	99.6	100.0	100.0
ESSEX	6.0	31.3	73.1	88.1	92.5	95.5	97.0	98.5	100.0	100.0
FRANKLIN	1.6	58.4	86.0 +	93.4	95.7	97.3	98.4	99.4	99.6	100.0
GRAND ISLE	0.0	53.6	82.1	94.6	98.2	98.2	100.0	100.0	100.0	100.0
LAMOILLE	0.4	43.0	79.7	92.2	96.1	98.0	99.2	99.6	99.6	100.0
ORANGE	0.4	33.5	81.3	91.6	94.0	97.2	98.4	99.2	100.0	100.0
ORLEANS	4.5	58.2	86.1 +	94.3	97.3	99.0	99.3	99.8	99.8	100.0
RUTLAND	1.0	43.3	85.1 +	93.5	96.1	97.6	98.1	99.3	99.8	100.0
WASHINGTON	0.8	36.2	79.6	90.5	95.7	97.0	98.5	99.7	100.0	100.0
WINDHAM	2.4	48.1	79.7	91.4	95.7	97.8	99.7	100.0	100.0	100.0
WINDSOR	1.1	45.1	82.0	90.2	95.5	97.6	98.7	99.2	99.5	100.0
TOTAL	1.5	41.8	81.4	92.2	96.0	97.9	98.8	99.6	99.9	100.0

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

# Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

## 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	18	6	98	150	3	275
BENNINGTON	32	34	180	183	11	440
CALEDONIA	31	17	147	161	9	365
CHITTENDEN	96	60	411	436	16	1019
ESSEX	9	7	24	27	1	68
FRANKLIN	36	19	216	214	7	492
GRAND ISLE	3	4	18	31	1	57
LAMOILLE	20	14	147	75	0	256
ORANGE	22	10	113	105	3	253
ORLEANS	24	22	177	177	10	410
RUTLAND	42	19	192	330	3	586
WASHINGTON	41	22	155	179	13	410
WINDHAM	34	22	89	225	11	381
WINDSOR	39	34	128	176	4	381
TOTAL	447	290	2095	2469	92	5393

### ROW PERCENTS - EXCLUDING UNKNOWNNS

COUNTY OF RESIDENCE	Inadequate	Intermediate	Adequate	Intensive	COUNTY OF RESIDENCE	PERCENT WITH AT LEAST ADEQUATE CARE UTILIZATION
ADDISON	6.6	2.2	36.0	55.1	ADDISON	91.2 +
BENNINGTON	7.5	7.9	42.0	42.7	BENNINGTON	84.6
CALEDONIA	8.7	4.8	41.3	45.2	CALEDONIA	86.5
CHITTENDEN	9.6	6.0	41.0	43.5	CHITTENDEN	84.4
ESSEX	13.4	10.4	35.8	40.3	ESSEX	76.1 -
FRANKLIN	7.4	3.9	44.5	44.1	FRANKLIN	88.7
GRAND ISLE	5.4	7.1	32.1	55.4	GRAND ISLE	87.5
LAMOILLE	7.8	5.5	57.4	29.3	LAMOILLE	86.7
ORANGE	8.8	4.0	45.2	42.0	ORANGE	87.2
ORLEANS	6.0	5.5	44.3	44.3	ORLEANS	88.5
RUTLAND	7.2	3.3	32.9	56.6	RUTLAND	89.5 +
WASHINGTON	10.3	5.5	39.0	45.1	WASHINGTON	84.1
WINDHAM	9.2	5.9	24.1	60.8	WINDHAM	84.9
WINDSOR	10.3	9.0	34.0	46.7	WINDSOR	80.6 -
TOTAL	8.4	5.5	39.5	46.6	TOTAL	86.1

+ significantly higher than state percentage

- significantly lower than state percentage

## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

### 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 <sup>^</sup>	Quit <sup>^*</sup>
ADDISON	76	196	3	275	76	17
BENNINGTON	163	261	16	440	161	47
CALEDONIA	126	233	6	365	126	32
CHITTENDEN	216	788	15	1019	218	49
ESSEX	23	43	2	68	24	5
FRANKLIN	165	315	12	492	165	43
GRAND ISLE	21	34	2	57	21	6
LAMOILLE	69	184	3	256	69	13
ORANGE	92	157	4	253	92	22
ORLEANS	121	281	8	410	121	33
RUTLAND	204	377	5	586	204	46
WASHINGTON	146	256	8	410	146	38
WINDHAM	136	232	13	381	137	39
WINDSOR	125	248	8	381	125	22
TOTAL	1683	3605	105	5393	1685	412

#### PERCENTAGES

COUNTY OF RESIDENCE	Smoked Before Pregnancy	Did Not Smoke Before Pregnancy	COUNTY OF RESIDENCE	Percent of Smokers Who Quit <sup>^*</sup>
ADDISON	27.9	72.1	ADDISON	22.4
BENNINGTON	38.4 +	61.6	BENNINGTON	29.2
CALEDONIA	35.1	64.9	CALEDONIA	25.4
CHITTENDEN	21.5 -	78.5	CHITTENDEN	22.5
ESSEX	34.8	65.2	ESSEX	20.8
FRANKLIN	34.4	65.6	FRANKLIN	26.1
GRAND ISLE	38.2	61.8	GRAND ISLE	28.6
LAMOILLE	27.3	72.7	LAMOILLE	18.8
ORANGE	36.9 +	63.1	ORANGE	23.9
ORLEANS	30.1	69.9	ORLEANS	27.3
RUTLAND	35.1	64.9	RUTLAND	22.5
WASHINGTON	36.3 +	63.7	WASHINGTON	26.0
WINDHAM	37.0 +	63.0	WINDHAM	28.5
WINDSOR	33.5	66.5	WINDSOR	17.6 -
TOTAL	31.8	68.2	TOTAL	24.5

+ significantly higher than state percentage  
 - significantly lower than state percentage

+ significantly higher than state percentage  
 - 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.

## Vermont WIC - Maternal and Child Health Report - 2019

November 8, 2022

VT RESIDENT WIC BIRTHS BETWEEN JANUARY 1, 2017 and DECEMBER 31, 2019

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

COUNTY OF RESIDENCE	AGE OF MOTHER										TOTAL
	NUMBER OF EVENTS										
	<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	
ADDISON	0	4	16	81	91	56	19	8	0	0	275
BENNINGTON	0	5	40	127	138	85	37	8	0	0	440
CALEDONIA	0	1	22	121	114	72	33	2	0	0	365
CHITTENDEN	0	10	48	243	324	246	113	30	5	0	1019
ESSEX	0	2	4	18	22	16	4	2	0	0	68
FRANKLIN	0	6	45	166	145	92	37	1	0	0	492
GRAND ISLE	0	1	7	20	14	11	4	0	0	0	57
LAMOILLE	0	8	16	64	87	51	25	5	0	0	256
ORANGE	0	2	11	82	78	56	19	5	0	0	253
ORLEANS	1	14	31	130	149	57	25	3	0	0	410
RUTLAND	0	13	35	145	205	131	46	11	0	0	586
WASHINGTON	0	8	30	108	129	79	43	12	1	0	410
WINDHAM	0	6	26	94	116	87	47	5	0	0	381
WINDSOR	0	4	29	111	109	89	31	8	0	0	381
<b>TOTAL</b>	<b>1</b>	<b>84</b>	<b>360</b>	<b>1510</b>	<b>1721</b>	<b>1128</b>	<b>483</b>	<b>100</b>	<b>6</b>	<b>0</b>	<b>5393</b>

COUNTY OF RESIDENCE	ROW PERCENTS										TOTAL
	<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	
ADDISON	0.0	1.5	5.8	29.5	33.1	20.4	6.9	2.9	0.0	0.0	100.0
BENNINGTON	0.0	1.1	9.1 +	28.9	31.4	19.3	8.4	1.8	0.0	0.0	100.0
CALEDONIA	0.0	0.3 -	6.0	33.2	31.2	19.7	9.0	0.5	0.0	0.0	100.0
CHITTENDEN	0.0	1.0	4.7 -	23.8	31.8	24.1	11.1	2.9	0.5	0.0	100.0
ESSEX	0.0	2.9	5.9	26.5	32.4	23.5	5.9	2.9	0.0	0.0	100.0
FRANKLIN	0.0	1.2	9.1 +	33.7	29.5	18.7	7.5	0.2	0.0	0.0	100.0
GRAND ISLE	0.0	1.8	12.3	35.1	24.6	19.3	7.0	0.0	0.0	0.0	100.0
LAMOILLE	0.0	3.1	6.3	25.0	34.0	19.9	9.8	2.0	0.0	0.0	100.0
ORANGE	0.0	0.8	4.3	32.4	30.8	22.1	7.5	2.0	0.0	0.0	100.0
ORLEANS	0.2	3.4 +	7.6	31.7	36.3	13.9	6.1	0.7	0.0	0.0	100.0
RUTLAND	0.0	2.2	6.0	24.7	35.0	22.4	7.8	1.9	0.0	0.0	100.0
WASHINGTON	0.0	2.0	7.3	26.3	31.5	19.3	10.5	2.9	0.2	0.0	100.0
WINDHAM	0.0	1.6	6.8	24.7	30.4	22.8	12.3	1.3	0.0	0.0	100.0
WINDSOR	0.0	1.0	7.6	29.1	28.6	23.4	8.1	2.1	0.0	0.0	100.0
<b>TOTAL</b>	<b>0.0</b>	<b>1.6</b>	<b>6.7</b>	<b>28.0</b>	<b>31.9</b>	<b>20.9</b>	<b>9.0</b>	<b>1.9</b>	<b>0.1</b>	<b>0.0</b>	<b>100.0</b>

+ significantly higher than state percentage (95% confidence level); - significantly lower than state percentage

## Vermont WIC - Maternal and Child Health Report - 2019

New Families at Risk

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

2017-2019

County	First Births	Number to Women <20, Unmarried, < HS Education	Percent
Addison	108	7	6.5%
Bennington	152	18	11.8%
Caledonia	129	5	3.9% -
Chittenden	359	22	6.1% -
Essex	19	2	10.5%
Franklin	184	19	10.3%
Grand Isle	23	2	8.7%
Lamoille	100	10	10.0%
Orange	112	7	6.3%
Orleans	161	19	11.8%
Rutland	219	18	8.2%
Washington	140	18	12.9%
Windham	139	12	8.6%
Windsor	146	16	11.0%
Vermont	1991	175	8.8%

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

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