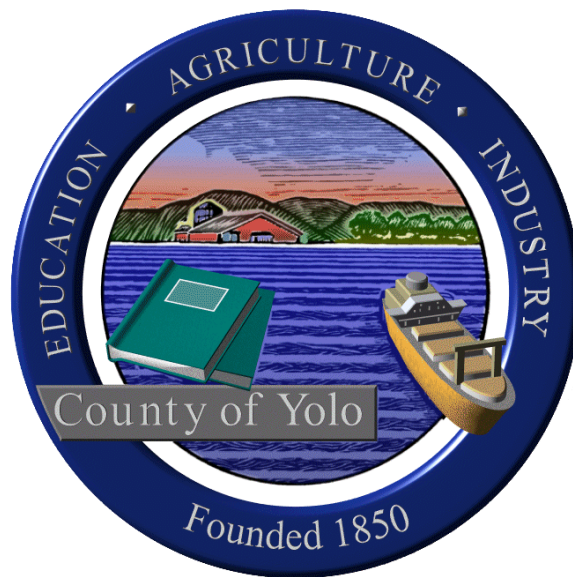


# LIVE BIRTH PROFILE

## FOR YOLO COUNTY 2017 BIRTHS



Authors:

Haydee Dabritz, PhD; Epidemiologist  
Ramy Hussein, MPH; MCAH Program Coordinator  
Anna Sutton; MCAH Director  
Community Health Branch  
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# LIVE BIRTH PROFILE, YOLO COUNTY, 2017

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## Executive Summary

The number of live births to Yolo County mothers (n=2,265) in 2016 fell by about 150 births (6%) compared to 2016. Early entry into prenatal care (PNC), i.e., in the first trimester of pregnancy, improved from 80% to 83%. It continues to exceed the Healthy People (HP) 2020 target of 77.9%. For women on MediCal, PNC in the first trimester remained at 71% in 2017. Countywide 40% of births were to mothers receiving MediCal.

The teen birth rate in 2017 dropped slightly to 7.7 live births per 1,000 females aged 15 to 19 years from 8.5 births per 1,000 in 2016. It is significantly lower than the state teen birth rate of 16.7 births per 1,000 in 2016. The Hispanic teen birth rate in Yolo County continues the downward trend that began in 2007, when it was 52.4 births per 1,000 women (more than twice today's rate). The Hispanic teen birth rate for West Sacramento residents fell from 36.9 births per 1,000 women in 2016 to 21.3 births per 1,000 in 2017. The White teen birth rate has flattened out at around 5 births per 1,000 women since 2013. The largest number of teen births once again occurred in Woodland (n=32), followed by West Sacramento (n=24). Nineteen percent of teen births (about one out of five) were to mothers who had at least one prior live birth, similar to the statewide percentage (16.0%) in 2016.

The percentage of preterm births (<37 weeks gestation), dropped slightly from 7.7% of live births in 2016 to 7.2% in 2017. Mothers residing in rural (unincorporated) areas of the county had the highest percentage of preterm births (15.7%) and low birth weight births (8.7%) in 2017 compared to other geographic areas of the county. The Yolo County C-section rate of 26% remained similar to the percentages in 2014, 2015 and 2016, and is significantly lower than the statewide rate of 32% in 2016. It remained even lower (at 21%) for resident births occurring at the two in-county delivery hospitals, Sutter Davis Hospital and Woodland Memorial Hospital.

Maternal obesity during pregnancy plateaued at 27% (one out of every four mothers). It has significantly increased for both obese (BMI  $\geq 30$ ) and morbidly obese (BMI  $\geq 40$ ) mothers since 2007 ( $p^2=0.88$  and  $p^2=0.74$ , respectively). The prevalence of gestational diabetes mellitus (GDM) has fluctuated between 7.9% and 10.5% since 2012, and stood at 9.2% in 2017, almost the same as 2016 (9.3%). The prevalence of gestational hypertension has increased in nonlinear fashion from 3.2% of mothers in 2009 to 5.6% in 2017. These conditions are more likely to occur in pregnancy if mothers are obese at the start of the pregnancy.

**Table 1. Selected Birth Outcomes for Resident Live Births, 2017.**

Variable	Classification	%						
		% Early EPNC	% Adequate PNC	% LBW	% Pre-term	% Medi-Cal	% 1st Birth	% Teen
Maternal race/ethnicity (non-Hispanic unless specified otherwise)	African American/Black	78.1%	76.7%	11.0%	9.6%	54.8%	43.8%	8.2%
	Asian/Pacific Islander	81.7%	81.7%	5.4%	6.2%	27.0%	47.7%	0.0%
	Hispanic	77.8%	77.8%	6.2%	7.5%	54.3%	33.7%	5.3%
	White	84.2%	84.1%	4.9%	6.7%	25.0%	40.4%	2.6%
Maternal age group (years)	15 to 19	70.0%	70.0%	7.5%	8.8%	76.3%	81.3%	
	20 to 24	74.2%	74.2%	6.4%	8.1%	60.0%	53.1%	
	25 and older	82.3%	82.1%	5.9%	6.9%	56.9%	33.9%	
Maternal education	0-8 yr	73.1%	73.1%	1.9%	1.9%	100.0%	13.5%	3.8%
	9-12 yr (no HS diploma/GED)	74.3%	74.3%	6.7%	12.4%	84.8%	27.6%	21.0%
	HS diploma/GED	77.4%	77.4%	7.7%	7.7%	58.2%	32.8%	7.2%
	College (no degree)	79.4%	79.2%	5.8%	7.4%	38.1%	39.3%	1.7%
	College degree	86.8%	86.7%	5.1%	6.5%	13.8%	46.9%	0.0%
Maternal residence	Davis	82.1%	82.1%	5.5%	7.6%	25.5%	42.4%	1.3%
	West Sacramento	84.6%	84.5%	7.4%	7.6%	37.0%	40.0%	3.3%
	Winters	79.8%	79.8%	6.7%	7.7%	46.2%	36.5%	5.8%
	Woodland	77.2%	76.9%	4.6%	5.3%	46.9%	35.7%	3.8%
	Unincorporated areas	74.8%	74.8%	8.7%	15.7%	53.0%	36.5%	8.7%
Payment source for delivery	Medi-Cal	70.7%	70.6%	5.6%	5.2%		31.6%	6.8%
	Private Insurance	87.3%	87.2%	6.2%	8.4%		43.0%	1.4%
	Self-Pay (Uninsured)	66.7%	66.7%	6.7%	6.7%		46.7%	0.0%
	Other	100.0%	100.0%	0.0%	0.0%		0.0%	0.0%
<b>Yolo County Totals</b>		82.7%	82.7%	6.0%	7.2%	39.5%	38.6%	3.5%
<b>California Totals (2016)</b>		83.7%	n/a	6.8%	8.7%	n/a	38.6%	3.7%

**% Early EPNC** = Percent of mothers entering prenatal care in the first trimester.

**% Adequate PNC** = Percent of mothers receiving Adequate (or Adequate Plus) prenatal care according to the Kotelchuck Index (APNCU Index) derived from month of entry into prenatal care, number of prenatal visits and gestational age.

**% LBW** = Percent of live births weighing less than 2,500 grams at time of birth.

**% Preterm** = Percent of live births with gestational age less than 37 weeks (obstetrical estimate).

**% MC** = Percent of live births with Medi-Cal as payment source for delivery.

**% 1st Birth** = Percent of live births to first-time mother.

**% Teen** = Percent of live births to mothers aged 15-19.

Data Sources: Yolo County Community Health Branch, Vital Records. California data: CDC Wonder (<https://wonder.cdc.gov>)

N/A Data not available from California Department of Public Health.

## Teen Births

**Table 2-A. Teen Birth Rates by Maternal Race/Ethnicity, Yolo County Residents, 2017.**

	Number of Births to Females Age 15-19	Yolo County Teen Birth Rate per 1,000*	California Teen Birth Rate (2016)
African American/Black	6	24.1	19.4
American Indian/Alaska Native	<5	**	19.6
Asian	0	0.0	2.8
Hispanic	45	12.0	25.1
Pacific Islander	0	0.0	11.9
White	24	5.9	7.5
More Than One Race	<5	**	12.0
Missing	0	N/A	N/A
<b>All Teen Births</b>	78	7.7	16.7
<b>All Non-White</b>	54	8.8	20.3

\*Teen birth rate = number of live births to mothers age 15-19 per 1,000 females aged 15-19. Rates based on fewer than 20 live births may be unstable or unreliable.

\*\*Not calculated for <5 births.

**Table 2-B. Teen Birth Rates by Maternal City of Residence, Yolo County Residents, 2017.**

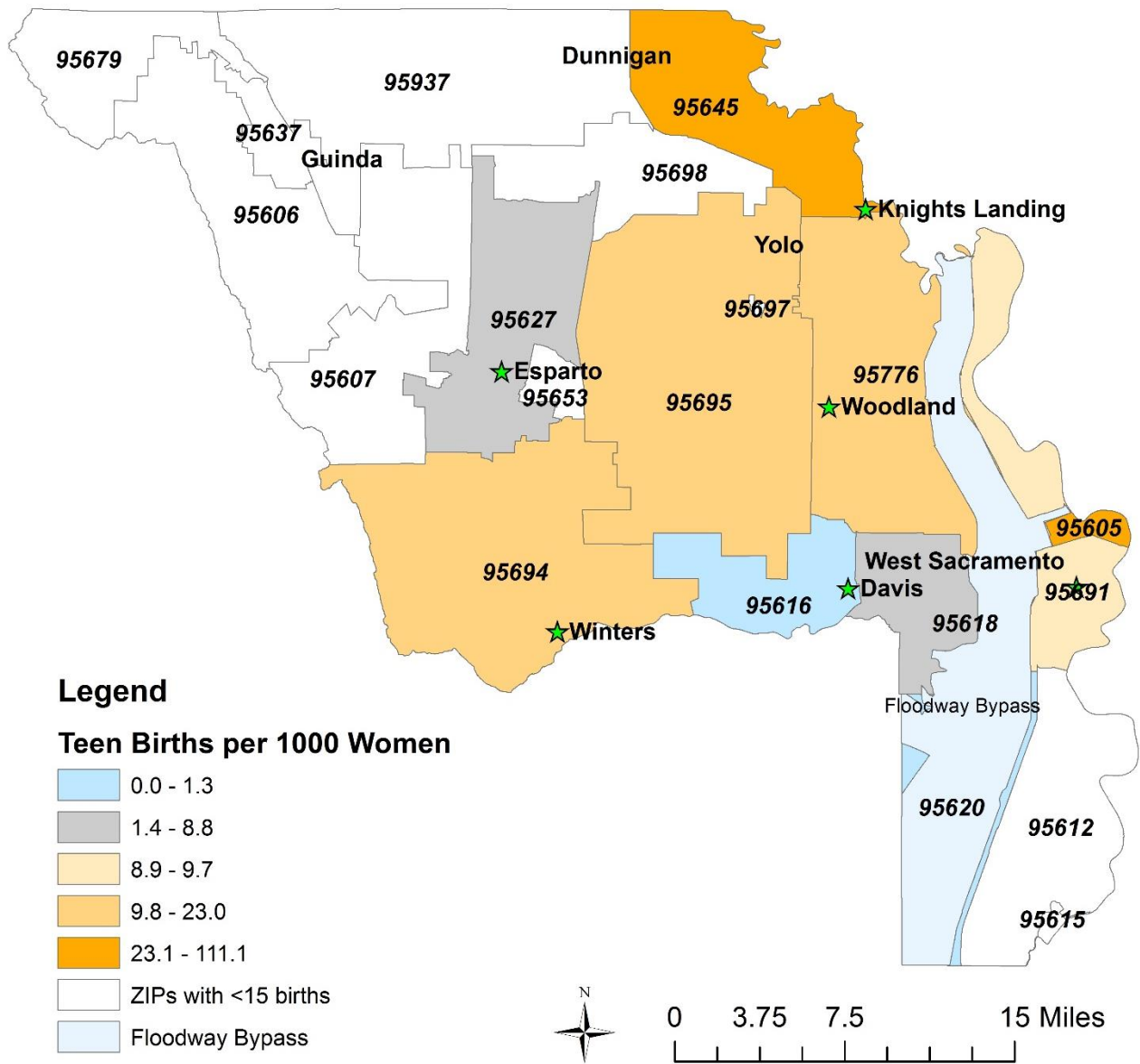
Jurisdiction	Number of Births to Females Age 15-19	Teen Birth Rate per 1,000*	Hispanic Teen Birth Rate per 1,000	Non-Hispanic White Teen Birth Rate per 1,000
Davis	6	**	**	**
West Sacramento	24	16.0	21.3	12.7
Woodland	32	14.4	18.6	11.9
Winters & Unincorporated Areas	16	5.1	6.7	**
Winters	6	**	**	**
<b>Yolo County Total</b>	78	7.7	12.0	5.9

\*Teen birth rate = number of live births to mothers age 15-19 per 1,000 females aged 15-19. Rates based on fewer than 20 live births may be unstable or unreliable.

\*\*Rates not calculated for fewer than 10 live births.

Data Sources: Yolo County HHSA Community Health Branch, Vital Records. California Data: CDC Wonder at <http://wonder.cdc.gov/>; denominator data: California Department of Finance, Table E-1 at <http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/view.php>; US Census Bureau, American Community Survey 2016 (5-year estimates).

Figure 1. Teen Live Birth Rates (per 1000 Females aged 15 to 19) by ZIP code, Yolo County, 2017.

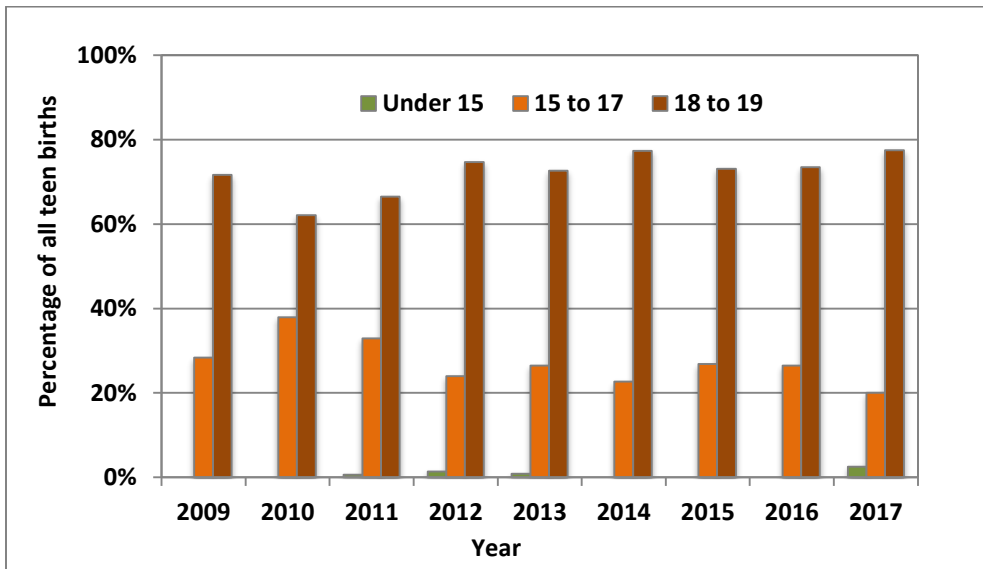


Note: The teen birth rate in all rural areas (white space) was 25.0 live births per 1,000 females, much higher than the county overall rate of 7.7 live births per 1,000 females.

**Table 2-C. Teen Births by Age Group, Yolo County, 2009 to 2017.**

Variable	Classification	2009	2010	2011	2012	2013	2014	2015	2016	2017
Age Group (years)	15 to 17	51	66	54	35	31	22	25	22	16
	18 to 19	129	108	109	109	85	75	68	61	62
Total Teen Births		180	174	164	146	117	97	93	83	80

**Figure 2. Percentage of Yolo County Live Births to Teens by Age Group, 2009 to 2017.**



**Table 3. Summary Statistics of Resident Live Births, Yolo County 2014 to 2017.**

<b>Variable</b>	<b>Classification</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	67	70	71	73
	American Indian/Alaska Native	19	10	15	13
	Asian	193	185	193	193
	Hispanic	952	932	974	842
	Pacific Islander	54	49	35	48
	White	994	942	976	925
	Other/More Than One Race	85	64	69	82
	Unknown/declined	45	63	87	89
Maternal Age Group (years)	Under 15	0	0	0	<5
	15 to 17	22	25	22	16
	18 to 19	75	68	61	62
	20 to 24	405	410	380	360
	25 to 34	1401	1338	1412	1288
	35 to 44	499	468	528	523
	45 & Older	7	6	17	<15
Maternal education	0-8 years	96	72	68	52
	9-11 years	188	116	138	105
	12 or more years	1986	1988	2039	1944
	Unknown/declined	139	139	175	164
Entry into Prenatal Care	First trimester	2003	1895	1942	1825
	After first trimester	370	398	425	372
	Never	10	14	13	9
Adequacy of PNC Utilization	Adequate or better	1882	1894	1940	1822
	Intermediate or Inadequate	519	398	437	381
Payment Source for PNC	Medi-Cal	1025	952	944	895
	Private Insurance	1338	1315	1428	1341
	Self-pay (uninsured)	25	27	24	17
	Medically unattended birth	10	<15	13	<10
	Other	5	<5	7	<5
Method of Delivery	Vaginal Delivery	1823	1743	1814	1678
	C-Section	586	572	606	587
Birth Weight (grams)	Less than 1,500	28	26	23	25
	1,500 to 2,499	100	100	130	111
	2,500 to 3,999	1951	1957	1996	1873
	4,000 & Above	325	232	271	256
Multiple Gestation	Singleton	2319	2240	2331	2181
	Twin or more	90	75	89	84
Gestational Age	Preterm (less than 37 weeks)	176	151	186	162
	Near-Term, Full-Term or Overdue	2233	2164	2234	2103
Total Live Births		2409	2315	2420	2265

*Counts <5 suppressed, resulting in suppression of other cells in the same column.*



Figure 3. Percentage of Yolo County Live Births with 1<sup>st</sup>-Trimester Prenatal Care, 2007 to 2017.

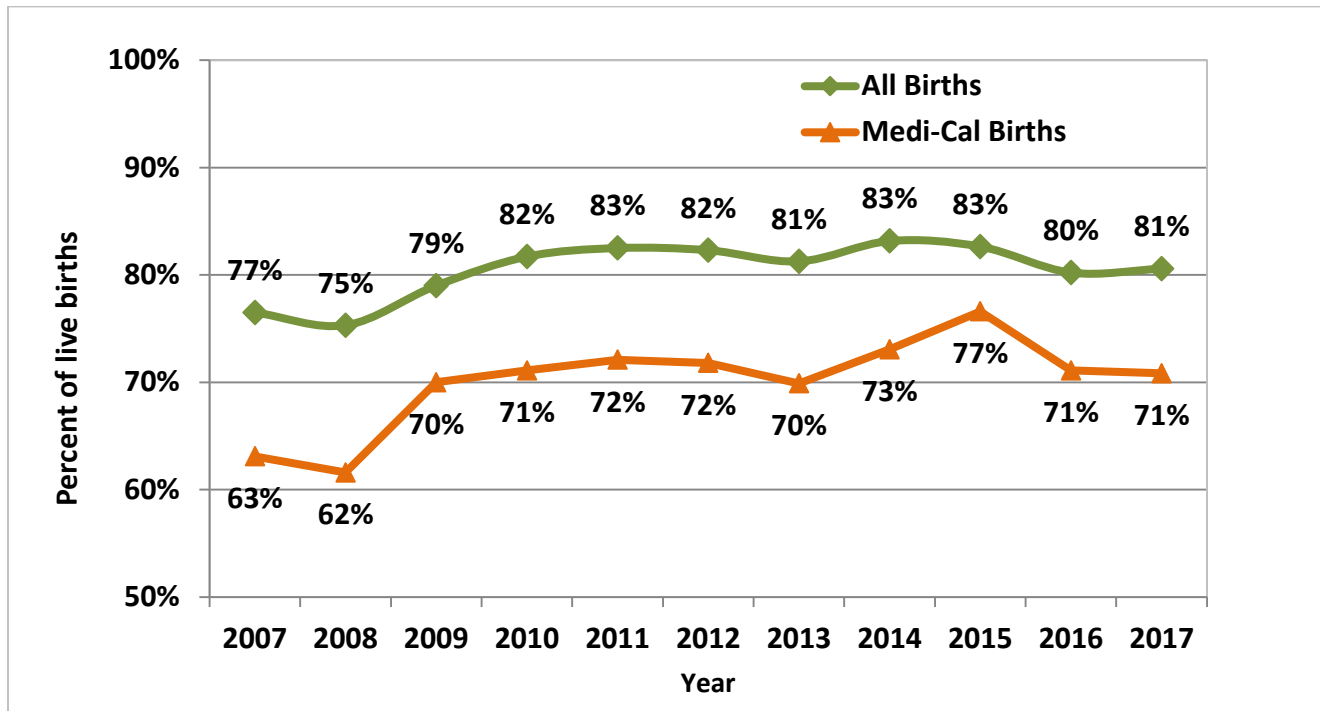
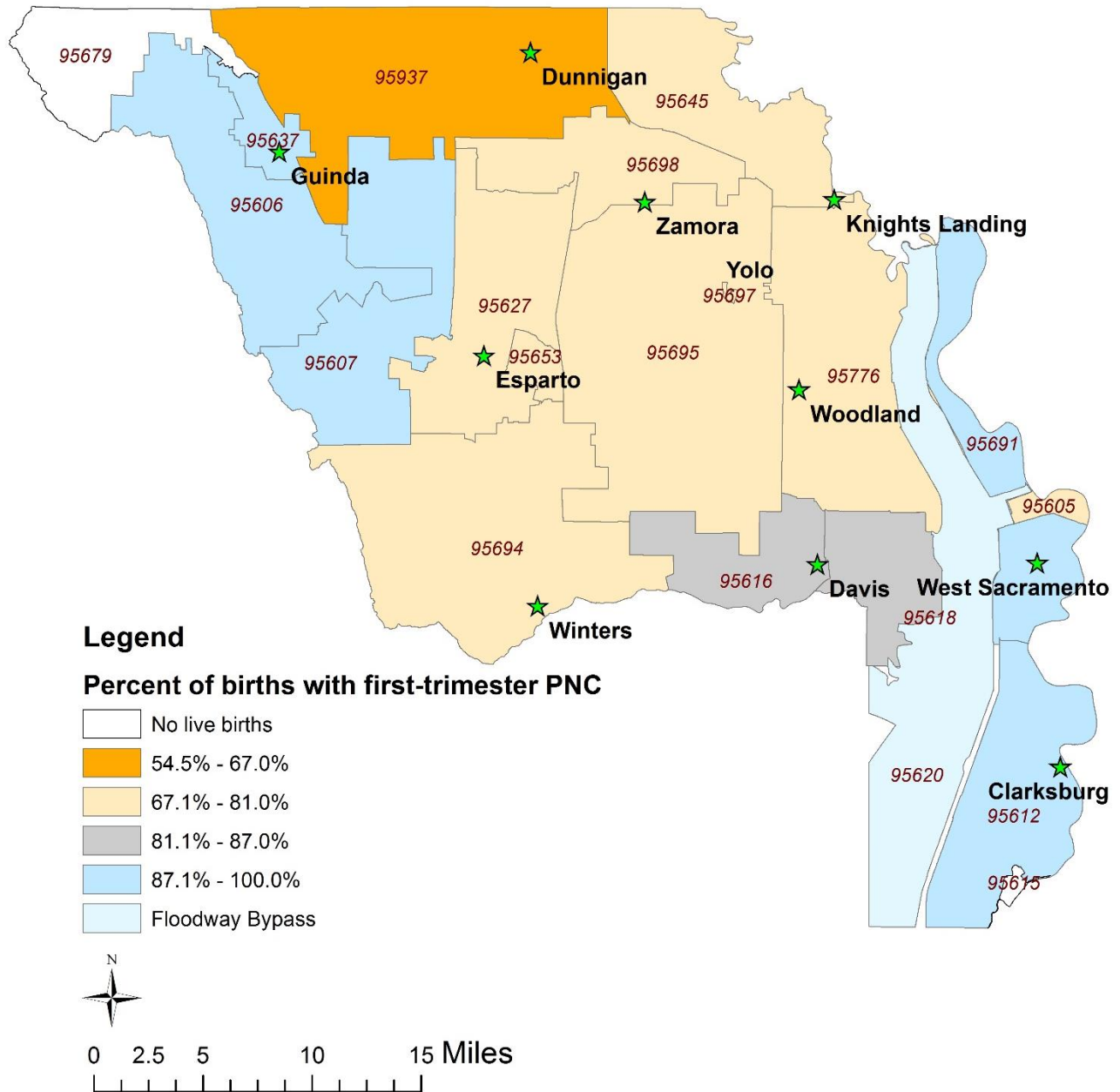


Figure 4. Percentage of Live Births with 1<sup>st</sup>-Trimester Prenatal Care by ZIP code, Yolo County 2017.



**Table 4. Resident Live Births by Maternal Age Group (years) for Mothers <25, Yolo County, 2017.**

<b>Variable</b>	<b>Classification</b>	<b>15-19</b>	<b>20-24</b>	<b>All Live Births</b>
Maternal race/ ethnicity (non- Non-Hispanic unless specified otherwise)	African American/Black	6	12	73
	American Indian/Alaska Native		<5	13
	Asian		14	193
	Hispanic	55	190	842
	Pacific Islander		<10	48
	White	24	107	925
	Other/More Than One Race		10	82
	Unknown/declined		18	89
Parity	Primiparous (first birth)	65	191	874
	Primiparous receiving Medi-Cal	33	98	285
	Multiparous (more than one birth)	15	169	1381
Maternal education	0-12 yr (no HS diploma/GED)	23	22	157
	HS diploma/GED	39	163	545
	College (no degree)	10	118	582
	College degree		23	817
	Unknown/declined	6	33	164
Entry into Prenatal Care	First trimester	55	267	1825
	After first trimester	20	78	372
	Never	<5	<5	9
	Unknown	<5	11	59
Adequacy of PNC Utilization	Adequate or better	55	267	1822
	Intermediate or Inadequate	20	82	381
	Unknown	<5	11	62
Payment Source for PNC	Medi-Cal	60	216	895
	Private Insurance	17	140	1341
	Medically unattended birth		<5	<10
	Self-pay (uninsured)	<5	<5	17
	Other/Unknown			<5
Medi-Cal Payment Source	Kaiser-Roseville		<5	19
	Kaiser-So Sacramento		<5	9
	Kaiser-Vacaville	<5	5	13
	Sutter-Davis	28	103	417
	Sutter Med Ctr-Sacramento	<5	19	62
	UC-Davis Med Ctr	<5	5	25
	Woodland Memorial	21	69	296

<b>Variable</b>	<b>Classification</b>	<b>15-19</b>	<b>20-24</b>	<b>All Live Births</b>
Medi-Cal Payment Source	Davis	5	14	121
	West Sacramento	16	84	269
	Winters	5	11	40
	Woodland	26	94	396
	Other unincorporated areas	8	13	69
Method of Delivery	Vaginal Delivery	64	299	1678
	C-Section	14	61	587
Birth Weight (grams)	Less than 1,500	<5	<5	25
	1,500 to 2,499	<5	20	111
	2,500 to 3,999	66	299	1873
	4,000 & Above	6	38	256
Gestational Age	Preterm (less than 37 weeks)	7	29	162
	Near-Term, Full-Term or Overdue	71	331	2103
<b>Total Live Births</b>		<b>78</b>	<b>360</b>	<b>2265</b>

*Where counts <5 suppressed, suppression of other cells in the same column was necessary.*

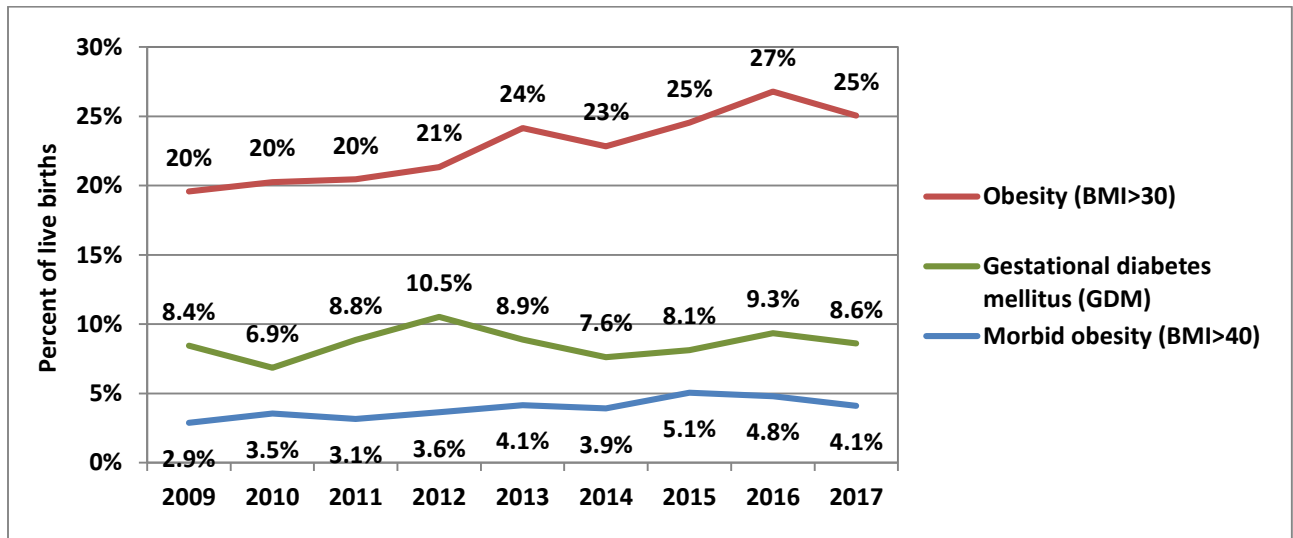
**Table 5. Resident Live Births by Maternal City of Residence, Yolo County, 2017.**

Variable	Classification	Davis (ZIPs 95616, 95617, 95618)	West Sacramento (ZIPs 95605, 95691, 95798, 95799)	Winters (ZIP 95694)	Woodland (ZIPs 95695 & 95776)	Unincorporated Areas
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	20	33	<5	18	<5
	American Indian/Alaska Native	<5	6		<5	
	Asian	108	51		33	<5
	Hispanic	67	230	60	422	63
	Pacific Islander	<15	25		<15	<5
	White	226	331	38	283	47
	Other/More Than One Race	13	26		43	
	Unknown/Declined	27	25	<10	31	<5
Parity	Primiparous (first birth)	201	291	38	302	42
	Multiparous (more than one birth)	273	436	66	543	73
Maternal edu- cation (excludes unknown/declined)	0-12 yr (no HS diploma/GED)	5	45	14	78	15
	HS diploma/GED	32	184	27	260	42
	College (no degree)	65	206	27	245	39
	College degree	339	221	30	210	17
Entry into Prenatal Care (excludes missing)	First trimester	389	615	83	652	86
	After first trimester	77	93	18	159	25
	Never	<5	<5		<5	
Adequacy of PNC Utilization	Adequate or better	389	614	83	650	86
	Intermediate or Inadequate	80	97	18	161	25
Payment Source for Delivery	Medi-Cal	121	269	48	396	61
	Private Insurance	347	448	54	440	52
	Medically unattended birth	<5	<5		<5	
	Self-pay (uninsured)	<5	<10	<5	5	<5
	Other				<5	
Method of Delivery	Vaginal Delivery	379	504	74	640	81
	C-Section	95	223	30	205	34
Birth Weight (grams)	Less than 1,500	<5	12	<5	5	<5
	1,500 to 2,499	22	42	<10	34	<10
	2,500 to 3,999	397	586	78	715	97
	4,000 & Above	51	87	19	91	8
Gestational Age	Preterm (less than 37 weeks)	36	55	8	45	18
	Near-Term, Full-Term or Overdue	438	672	96	800	97
	<b>Total Live Births</b>	<b>474</b>	<b>727</b>	<b>104</b>	<b>845</b>	<b>115</b>

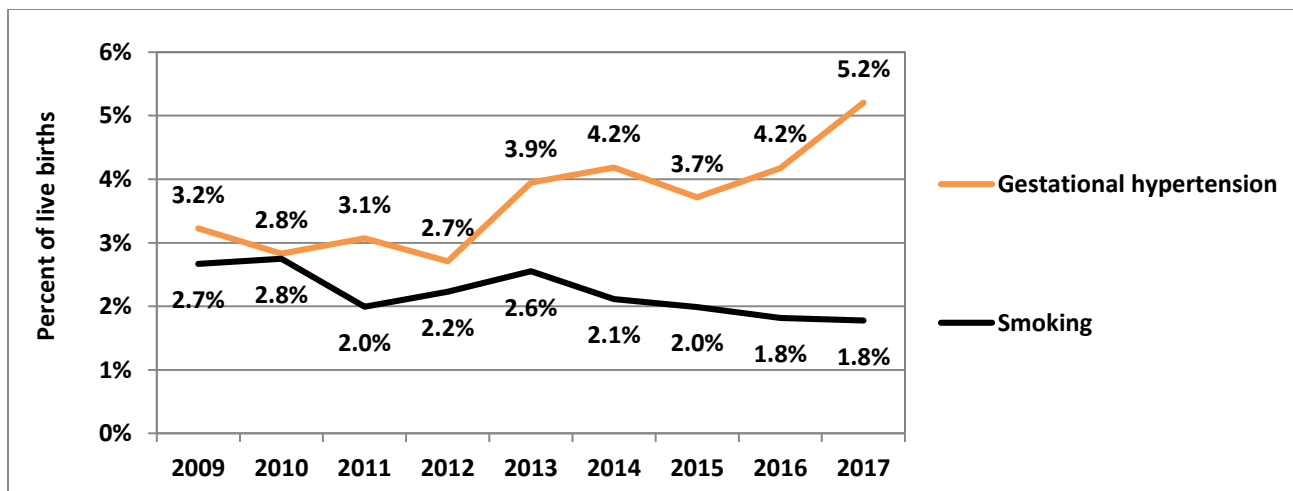
Where counts <5 were suppressed, suppression of other cells in the same column was necessary.

**Table 6. Trends in Selected Maternal Health Conditions Present during Pregnancy, Yolo County, 2009-2017.**

Condition/Illness	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend
Gestational diabetes mellitus	8.4%	6.9%	8.8%	10.5%	8.9%	7.6%	8.1%	9.3%	8.6%	No
Gestational hypertension	3.2%	2.8%	3.1%	2.7%	3.9%	4.2%	3.7%	4.2%	5.2%	Yes
Smoking	2.7%	2.8%	2.0%	2.2%	2.6%	2.1%	2.0%	1.8%	1.8%	No
Obesity (BMI>30)	19.6%	20.2%	20.4%	21.3%	24.2%	22.8%	24.5%	26.8%	25.0%	Yes
Morbid obesity (BMI>40)	2.9%	3.5%	3.1%	3.6%	4.1%	3.9%	5.1%	4.8%	4.1%	Yes



**Figure 5. Percentage of Live Births with Maternal Obesity, Morbid Obesity or GDM, Yolo County, 2009-2017.**



**Figure 6. Percentage of Live Births with Gestational Hypertension or Smoking, Yolo County, 2009-2017.**