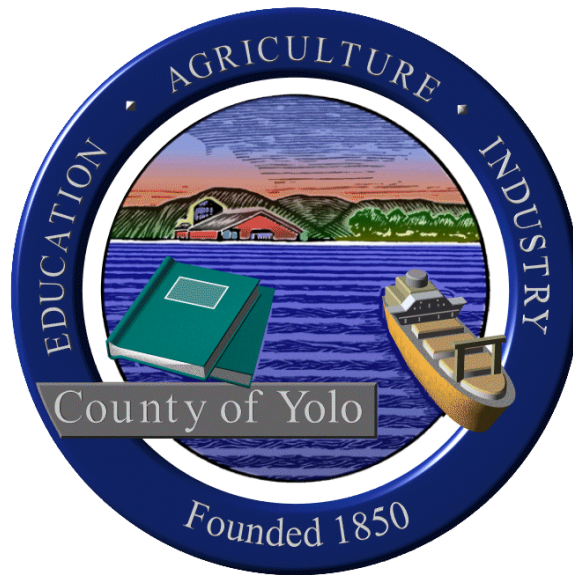


LIVE BIRTH PROFILE

YOLO COUNTY 2015



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LIVE BIRTH PROFILE, YOLO COUNTY, 2015

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Executive Summary

The number of live births to Yolo County mothers (n=2,315) fell again by about 100 births (4%) compared to 2014, and has decreased by almost 8% since 2013. Early entry into prenatal care (PNC), i.e., in the first trimester of pregnancy, remained stable at 82%, continuing to exceed the Healthy People (HP) 2020 target of 77.9%. For women on MediCal, PNC in the first trimester improved from 73% in 2014 to 76% in 2015. Countywide 41% of births were to mothers receiving MediCal.

The teen birth rate continued to decline from 13.0 births per 1,000 females aged 15 to 19 years in 2013 to 8.6 births per 1,000 in 2015. It is significantly lower than the state rate of 23.2 births per 1,000 in 2013 (the latest year for which state data are available). There has been a significant decreasing linear trend in Yolo County's teen birth rates for both Hispanic and White teen mothers since 2007, when the overall rate was 16.9 births per 1,000 females. The largest number of teen births occurred in Woodland (n=42) followed by West Sacramento with 34 teen births. Seventeen percent of teen births (almost one out of six) were to mothers who had at least one prior live birth, which is similar to the statewide percentage (16.4%) in 2014.

There was no trend in the proportion of low birth weight births (<2,500 grams); however, the percentage of preterm births (<37 weeks) has decreased significantly since 2011, declining from 8.7% to 6.5% of all live births. In 2015, mothers residing in the city of Winters had the highest percentage of low birth weight births (12%) and preterm births (10%) compared to other geographic areas of the county. The Yolo County C-section rate of 25% was similar to 2014 (24%) and significantly lower than the statewide rate of 32.7% in 2014. 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 continues to be a concern, and the prevalence has increased significantly for both obese (BMI ≥ 30) and morbidly obese (BMI ≥ 40) mothers since 2007 ($\rho^2=0.81$ and $\rho^2=0.73$, respectively). One in four mothers is obese at the start of pregnancy.

Table 1. Selected Birth Outcomes for Resident Live Births, 2015.

Variable	Classification	% Early EPNC	% Adequate PNC	% LBW	% Preterm	% Medi- Cal	% 1st Birth	% Teen
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	80.0%	80.0%	7.1%	8.6%	54.3%	44.3%	8.6%
	Asian/Pacific Islander	82.1%	82.1%	4.7%	4.7%	26.9%	44.4%	1.3%
	Hispanic	80.6%	80.6%	6.0%	7.1%	60.5%	35.5%	6.7%
	White	83.1%	83.0%	4.5%	5.9%	24.3%	41.1%	1.8%
Maternal age group (years)	15 to 19	65.6%	65.6%	8.6%	7.5%	78.5%	82.8%	
	20 to 24	74.6%	74.4%	7.1%	8.3%	67.1%	58.0%	
	25 and older	84.3%	84.3%	4.9%	6.1%	33.3%	33.0%	
Maternal education	0-8 yr	73.6%	73.6%	6.9%	5.6%	90.3%	11.1%	4.2%
	9-12 yr (no HS diploma/GED)	72.2%	72.2%	7.5%	9.8%	83.5%	30.1%	21.8%
	HS diploma/GED	76.4%	76.4%	6.0%	6.1%	65.9%	35.9%	8.0%
	College (no degree)	83.7%	87.5%	4.8%	5.5%	43.2%	38.2%	2.5%
	College degree	86.5%	87.5%	4.8%	6.4%	11.0%	45.8%	0.0%
Maternal residence	Davis	82.3%	82.3%	4.6%	5.2%	23.9%	48.7%	1.0%
	West Sacramento	85.6%	85.6%	5.0%	6.3%	40.6%	38.1%	4.6%
	Winters	78.8%	77.9%	12.5%	9.6%	43.3%	39.4%	1.9%
	Woodland	78.9%	78.9%	5.8%	7.4%	50.1%	35.0%	5.2%
	Other cities	79.7%	79.7%	3.6%	5.1%	54.3%	37.7%	7.2%
Payment source for delivery	Medi-Cal	75.6%	75.6%	5.4%	5.8%		35.9%	7.7%
	Private Insurance	87.2%	87.1%	5.3%	6.9%		42.3%	1.4%
	Self-Pay (Uninsured)	88.9%	88.9%	11.1%	7.4%		33.3%	3.7%
	Unattended birth	0.0%	0.0%	14.3%	21.4%		14.3%	0.0%
	Other	75.0%	75.0%	0.0%	0.0%		50.0%	0.0%
Yolo County Totals		81.9%	81.8%	5.4%	6.5%	41.1%	39.4%	4.0%
California Totals (2014)		83.2%	n/a	6.7%	8.5%	n/a	39.0%	5.4%

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

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

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

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

% 1st Birth = Percent primiparous live births.

% Teen = Percent live births to mothers age 15-19.

Data Sources: Yolo County Community Health Branch, Vital Records. California Data: California Department of Public Health, Office of Health Information & Research and Birth Records at

<http://www.cdph.ca.gov/data/statistics/Pages/StatewideBirthStatisticalDataTables.aspx>

N/A Data not available from CDPH.

Teen Births

Table 2-A. Teen Birth Rates by Maternal Race/Ethnicity, Yolo County Residents, 2015.

	Number of Births to Females Age 15-19	Yolo County Teen Birth Rate per 1,000*	California Teen Birth Rate (2014)
African American/Black	6	**	31.9
American Indian/Alaska Native	<5	**	58.3
Asian	<5	**	5.9†
Hispanic	62	19.2	34.9
Pacific Islander	<5	**	N/A
White	17*	4.5	9.4
More Than One Race	0	0.0	N/A
Missing	2	N/A	N/A
All Teen Births	93	8.6	20.4
All Non-White	74	10.6	24.9

†Includes Pacific Islanders.

Table 2-B. Teen Birth Rates by Maternal City of Residence, Yolo County Residents, 2015.

Jurisdiction	Number of Births to Females Age 15-19	Yolo County Teen Birth Rate per 1,000*	Hispanic Teen Birth Rate per 1,000	Non-Hispanic White Teen Birth Rate per 1,000
Davis	<10	**	**	**
West Sacramento	34	22.1	36.8	11.0
Woodland	42	19.7	31.5	6.7
Winters & Unincorporated Areas	12*	4.7	8.9	**
Winters	<5	**	**	**
Yolo County Total	93	8.6	22.4	3.9

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 Community Health Branch, Vital Records. California Data: California Department of Public Health, Office of Health Information & Research; 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 2011 (3-year estimates).

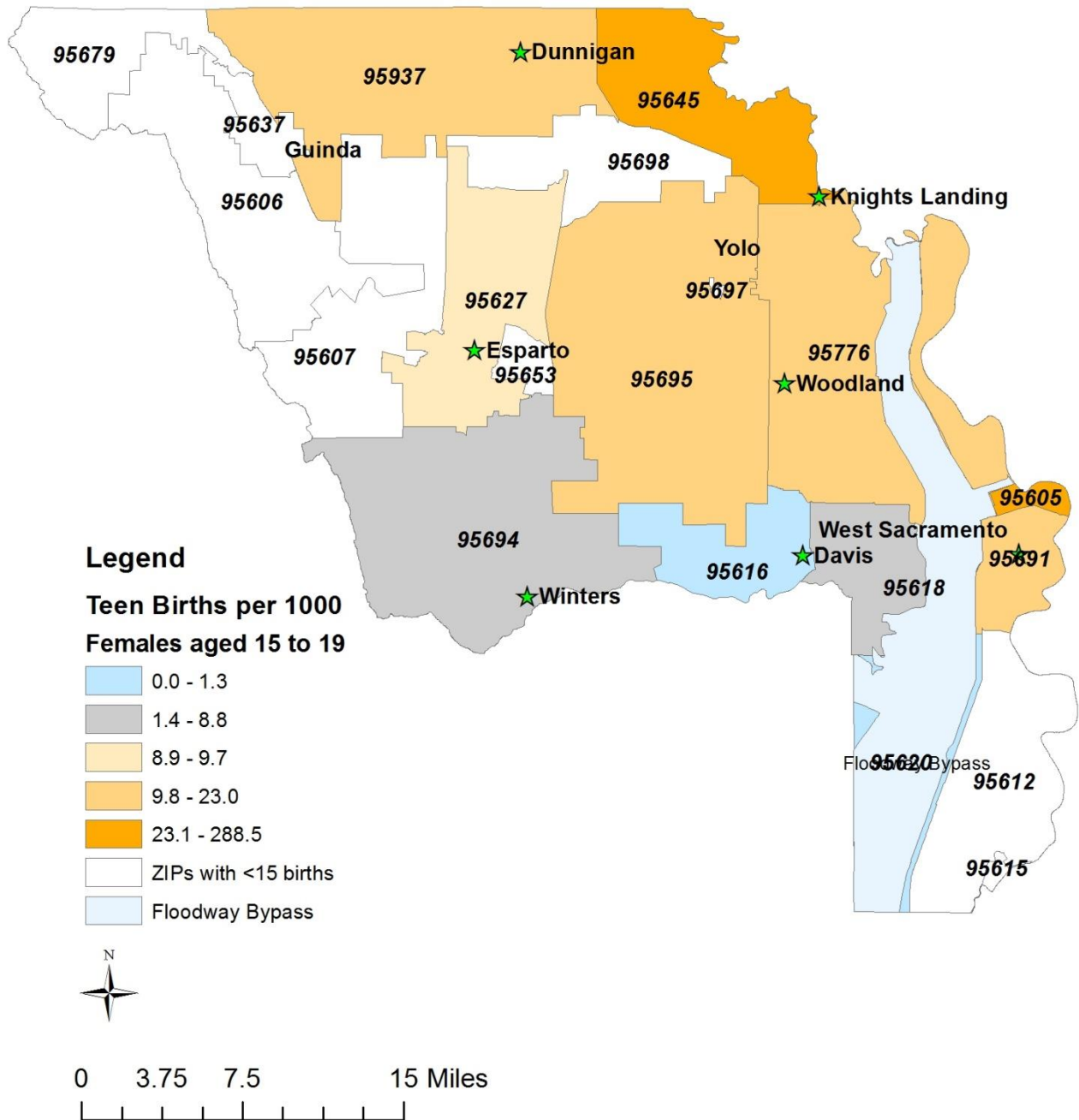


Figure 1. Teen Live Birth Rates (per 1000 Females aged 15 to 19) by ZIP code, Yolo County, 2015.

Table 2-C. Teen Births by Age Group, Yolo County, 2009 to 2015.

Maternal Age	2009	2010	2011	2012	2013	2014	2015
15 to 17	51	66	54	35	31	22	25
18 to 19	129	108	109	109	85	75	68
Total	180	174	163	144	116	97	93

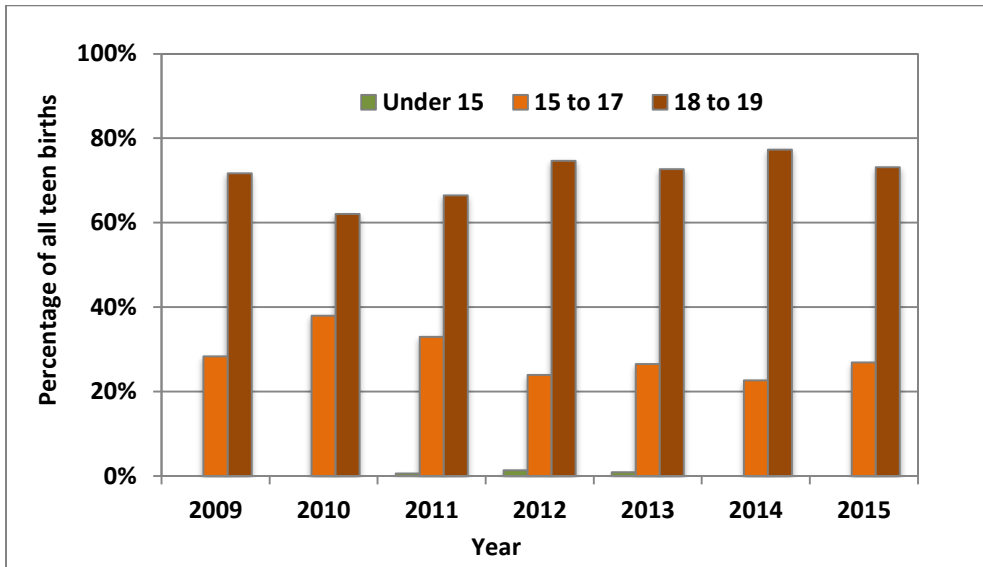


Figure 2. Percentage of Yolo County Live Births to Teens by Age Group, 2009 to 2015.

Table 3. Summary Statistics of Resident Live Births, Yolo County 2012 to 2015.

Variable	Classification	2012	2013	2014	2015
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	61	69	67	70
	American Indian/Alaska Native	19	16	19	10
	Asian	204	179	193	185
	Hispanic	982	994	952	932
	Pacific Islander	45	42	54	49
	White	1054	1092	994	942
	Other/More Than One Race	65	70	85	64
	Unknown/declined	43	51	45	63
Maternal Age Group (years)	Under 15	<5	<5	0	0
	15 to 17	35	31	22	25
	18 to 19	109	85	75	68
	20 to 24	424	429	405	410
	25 to 34	1442	1477	1401	1338
	35 to 44	457	483	499	468
	45 & Older	<5	<10	7	6
Maternal education	0-8 years	106	85	96	72
	9-11 years	220	176	188	116
	12 or more years	2020	2122	1986	1988
	Unknown/declined	127	130	139	139
Entry into Prenatal Care	First trimester	2033	2042	2003	1895
	After first trimester	381	444	370	398
	Never	10	7	10	14
Adequacy of PNC Utilization	Adequate or better	2031	2041	1882	1894
	Intermediate or Inadequate	390	451	519	398
Payment Source for Delivery	Medi-Cal	1021	1074	1025	952
	Private Insurance	1402	1390	1338	1315
	Self-pay (uninsured)	22	29	25	27
	Medically unattended birth	10	7	10	<15
	Other	13	12	5	<5
Method of Delivery	Vaginal Delivery	1848	1867	1823	1743
	C-Section	625	646	586	572
Birth Weight (grams)	Less than 1,500	16	24	28	26
	1,500 to 2,499	117	132	100	100
	2,500 to 3,999	2043	2047	1951	1957
	4,000 & Above	297	310	325	232
Multiple Gestation	Singleton	2389	2430	2319	2240
	Twin or more	84	83	90	75
Gestational Age	Preterm (less than 37 weeks)	193	201	176	151
	Near-Term, Full-Term or Overdue	2280	2312	2233	2164
Total Live Births		2473	2513	2409	2315

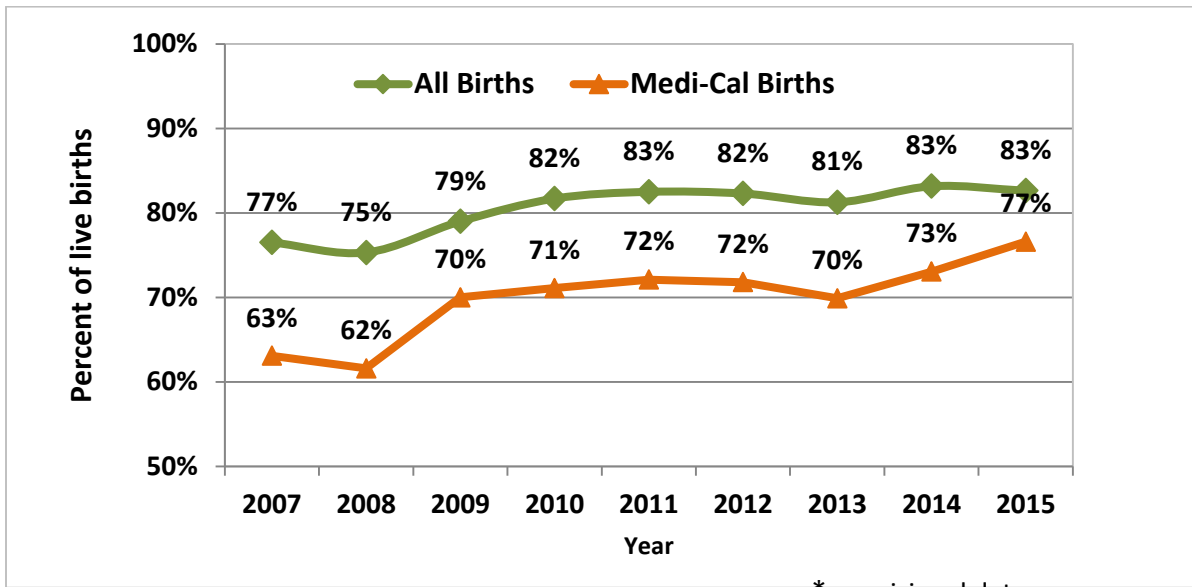


Figure 3. Percentage of Yolo County Live Births with 1st-Trimester Prenatal Care, 2007 to 2015.

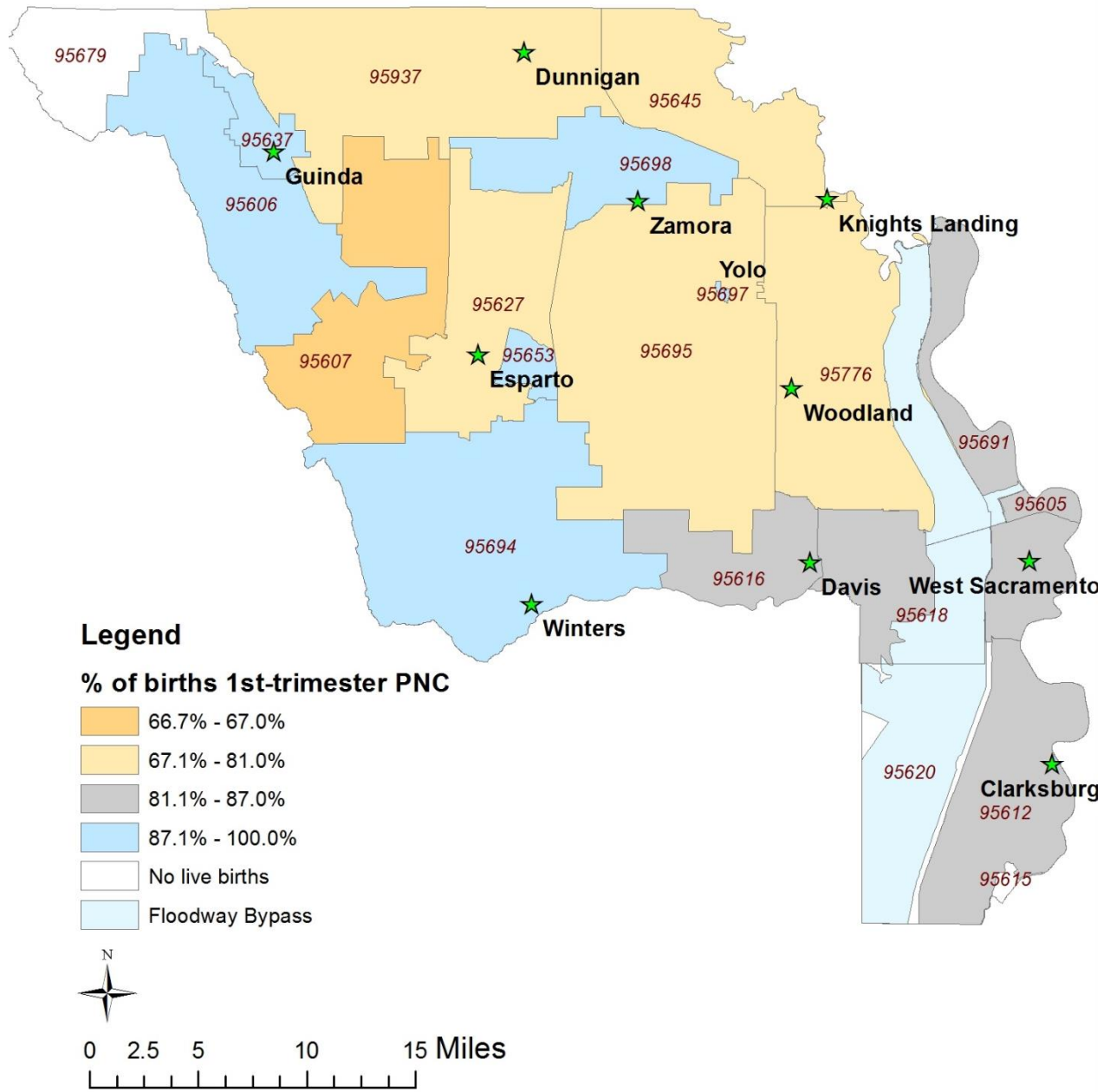


Figure 4. Percentage of Live Births with 1st-Trimester Prenatal Care by ZIP code, Yolo County 2015.

Table 4. Resident Live Births by Maternal Age Group (years) for Mothers <25, Yolo County, 2015.

Variable	Classification	<15	15-17	18-19	20-24	All Live Births
Maternal race/ ethnicity (non- Non-Hispanic unless specified otherwise)	African American/Black			6	19	70
	American Indian/Alaska Native	<5	<5	<5	<5	10
	Asian	<5	<5	12	185	
	Hispanic	22	40	235	932	
	Pacific Islander		<5	5	49	
	White	<5	16	127	942	
	Other/More Than One Race Unknown/declined			<5	64 63	
Parity	Primiparous (first birth)	23	54	238	913	
	Primiparous receiving Medi-Cal	19	41	147	135	
	Multiparous (more than one birth)	2	14	172	1401	
Maternal education	0-8 yr	<5	<5	<5	72	
	9-12 yr (no HS diploma/GED)	12	17	40	133	
	HS diploma/GED	9	34	167	537	
	College (no degree)		14	136	563	
	College degree			27	871	
	Unknown/declined	<5	<5	38	139	
Entry into Prenatal Care	First trimester	14	47	306	1895	
	After first trimester	11	19	90	398	
	Never			<5	14	
	Unknown			<5	8	
Adequacy of PNC Utilization	Adequate or better	14	47	305	1894	
	Intermediate or Inadequate	11	19	93	398	
	Unknown				23	
Payment Source for Delivery	Medi-Cal	20	53	275	952	
	Private Insurance	5	14	126	1315	
	Medically unattended birth			<5	14	
	Self-pay (uninsured)		<5	<5	27	
	Other/Unknown				7	
Medi-Cal Payment Source	Kaiser-Roseville	<5	<5	<5	15	
	Kaiser-So Sacramento				10	
	Kaiser-Vacaville			<5	9	
	Sutter-Davis	8	22	127	468	
	Sutter-Sacramento	<5	5	<5	61	
	UC-Davis Med Ctr		<5	8	29	
	Woodland Memorial	10	19	86	288	
Medi-Cal Payment Source	Davis		<5	23	124	
	West Sacramento	<10	19	100	302	
	Winters		<5	12	45	
	Woodland	11	24	121	406	
	All other cities	<5	5	19	75	

Variable	Classification	<15	15-17	18-19	20-24	All Live Births
Method of Delivery	Vaginal Delivery		24	58	327	1743
	C-Section		<5	10	83	572
Birth Weight (grams)	Less than 1,500				11	26
	1,500 to 2,499		<5	6	18	100
	2,500 to 3,999		22	56	340	1957
	4,000 & Above		<5	6	31	232
Gestational Age	Preterm (less than 37 weeks)		<5	5	34	151
	Near-Term, Full-Term or Overdue		23	63	376	2164
Total Live Births		0	25	68	410	2315

Table 5. Resident Live Births by Maternal City of Residence, Yolo County, 2015.

Variable	Classification	Davis (ZIPs 95616, 95617, 95618)	West Sacramento (ZIPs 95605, 95691, 95798, 95799)	Winters (ZIP 95694)	Woodland (ZIPs 95695 & 95776)	All Other Cities
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	20	28	<5	17	<5
	American Indian/Alaska Native	<5	5		<5	
	Asian	101	55		29	
	Hispanic	86	262	53	446	86
	Pacific Islander	<10	27	<5	<15	<5
	White	271	323	40	262	46
	Other/More Than One Race	11	22	<5	29	
	Unknown/Declined	20	21	5	14	<5
Parity	Primiparous (first birth)	253	283	41	284	52
	Multiparous (more than one birth)	266	460	63	527	85
Maternal education (excludes unknown/ declined)	0-8 yr	6	19	5	30	12
	9-12 yr (no HS diploma/GED)	11	44	8	60	10
	HS diploma/GED	31	174	24	265	43
	College (no degree)	61	208	32	218	44
	College degree	381	233	31	202	24
Entry into Prenatal Care (excludes missing)	First trimester	427	636	82	640	110
	After first trimester	90	93	20	157	24
	Never		8		<5	<5
Adequacy of PNC Utilization	Adequate or better	427	636	81	640	110
	Intermediate or Inadequate	90	101	20	161	26
Payment Source for Delivery	Medi-Cal	124	302	45	406	75
	Private Insurance	378	424	57	397	59
	Medically unattended birth		8		<5	<5
	Self-pay (uninsured)	13	10	<5	<5	<5
	Other	<5	<5			
Method of Delivery	Vaginal Delivery	421	546	73	595	108
	C-Section	98	197	31	216	30
Birth Weight (grams)	Less than 1,500	7	8	<5	9	<5
	1,500 to 2,499	17	29	12	38	<5
	2,500 to 3,999	445	644	83	672	113
	4,000 & Above	50	62	<10	92	20
Gestational Age	Preterm (less than 37 weeks)	27	47	10	60	7
	Near-Term, Full-Term or Overdue	492	696	94	751	131
Total Live Births		519	743	104	811	138

Table 6. Trends in Selected Maternal Health Conditions Present during Pregnancy, Yolo County, 2009-2015.

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

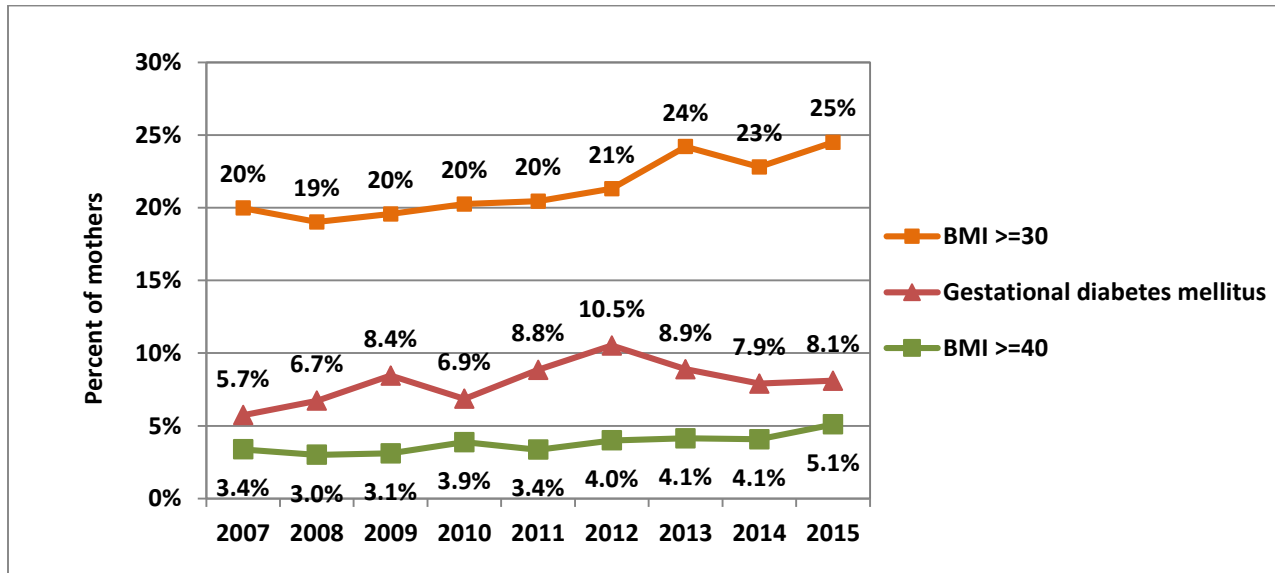


Figure 5. Percentage of Live Births with Maternal Obesity, Morbid Obesity or GDM, Yolo County, 2009-2015.

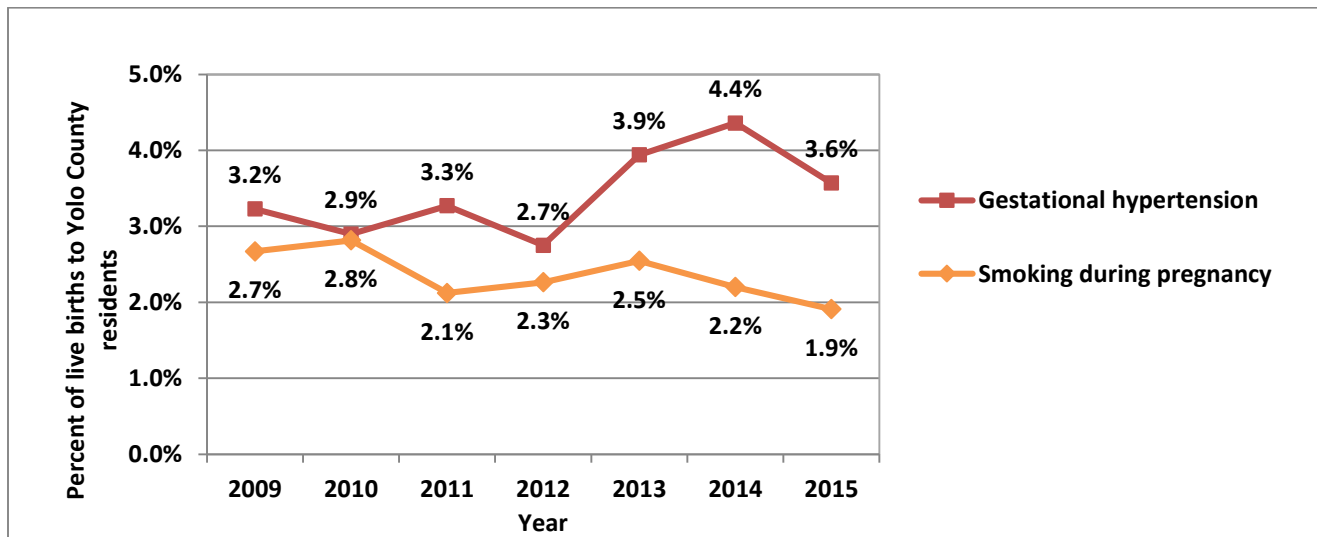


Figure 6. Percentage of Live Births with Gestational Hypertension or Smoking, Yolo County, 2009-2015.