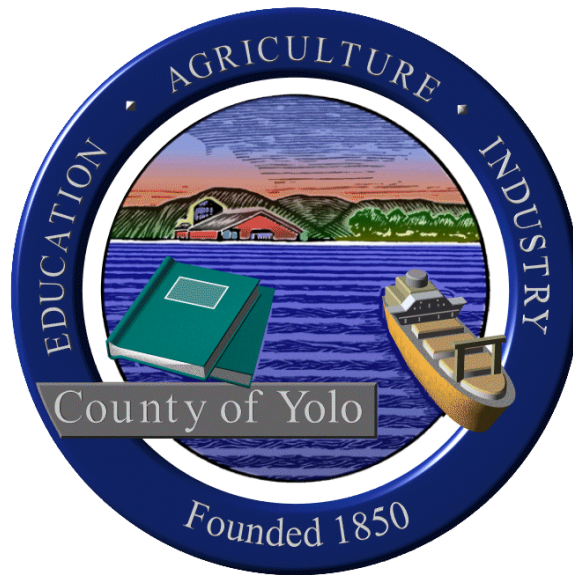


LIVE BIRTH PROFILE

YOLO COUNTY 2014



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LIVE BIRTH PROFILE, YOLO COUNTY, 2014

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Executive Summary

The number of live births to Yolo County mothers (n=2,409) fell by about 100 births (4%) compared to 2013. Early entry into prenatal care (PNC), i.e., in the first trimester of pregnancy, edged up to 83%, exceeding the Healthy People (HP) 2020 target of 77.9%. For women on MediCal, PNC in the first trimester improved to 73% and it jumped to 77% (from 65%) for teenage mothers. Countywide 42.5% of births were to mothers receiving MediCal, a 4.6% decrease compared to 2013.

The teen birth rate continued to decline from 13.0 births per 1,000 females aged 15 to 19 years in 2013 to 9.8 births per 1,000 in 2014. Yolo County's teen birth rate remains significantly below the state rate of 22.7 births per 1,000. The largest number of teen births occurred in Woodland (n=50) followed by West Sacramento with 35 teen births. Thirteen percent of teen births (almost one out of eight) were to mothers who had at least one prior live birth.

There was no trend in the proportion of preterm births (<37 weeks) or low birth weight births (<2,500 grams). In 2014, Woodland mothers had the highest percentage of low birth weight births (6%) and preterm births (9%) compared to other geographic areas of the county. The overall C-section rate of 24% for births to Yolo County mothers was significantly lower than the statewide rate of 33% (in 2013), and it was even lower (21%) for resident births occurring at the two in-county hospitals.

Maternal overweight and obesity during pregnancy continues to be a concern, since it increases the risk for gestational diabetes mellitus (GDM), C-section, preterm birth, and complications during delivery. Over half of the mothers who gave birth in 2014 were overweight or obese (body mass index [BMI] ≥ 25) at the start of their pregnancies and about one in four were obese (BMI ≥ 30). Maternal obesity has been on an upward trend ($\rho^2=0.73$) since 2007. The city of Davis had the lowest percentage of obese mothers (12%) in 2014, followed by West Sacramento (23%). In the remaining cities and areas, obesity ranged from 29% to 38%.

Table 1. Selected Birth Outcomes for Resident Live Births, 2014.

Variable	Classification	% Early EPNC	% Adequate PNC	% LBW	% Preterm	% Medi- Cal	% 1st Birth	% Teen
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	76.1%	68.7%	6.0%	6.0%	59.7%	40.3%	7.5%
	Asian/Pacific Islander	85.8%	83.4%	4.5%	6.5%	29.1%	40.9%	0.0%
	Hispanic	80.0%	77.8%	5.5%	6.7%	62.0%	34.9%	7.0%
	White	86.7%	78.4%	4.9%	7.6%	25.7%	37.3%	2.3%
Maternal age group (years)	15 to 19	77.3%	72.2%	6.2%	3.1%	70.1%	86.6%	
	20 to 24	73.6%	71.1%	5.7%	8.1%	66.9%	57.8%	
	25 and older	85.5%	79.9%	5.2%	7.3%	36.0%	30.2%	
Maternal education	0-8 yr	71.9%	77.1%	8.3%	11.5%	90.6%	12.5%	2.1%
	9-12 yr (no HS diploma/GED)	72.9%	75.0%	3.7%	5.3%	80.3%	30.3%	19.7%
	HS diploma/GED	77.1%	71.8%	5.7%	6.6%	63.8%	37.8%	7.3%
	College (no degree)	83.8%	81.4%	5.3%	7.0%	39.3%	35.4%	2.2%
	College degree	91.5%	83.1%	4.9%	7.8%	12.4%	41.0%	0.0%
Maternal residence	Davis	86.1%	78.9%	5.3%	7.6%	25.6%	43.4%	0.4%
	West Sacramento	83.6%	78.5%	5.0%	6.2%	43.4%	35.1%	4.6%
	Winters	86.3%	76.6%	4.0%	6.5%	44.4%	34.7%	3.2%
	Woodland	81.0%	77.1%	6.0%	8.7%	48.4%	36.2%	5.6%
	Other	81.7%	81.0%	3.9%	4.6%	56.9%	33.3%	3.9%
Payment source for delivery	Medi-Cal	73.1%	72.6%	5.3%	5.9%		35.9%	6.6%
	Private Insurance	91.9%	83.3%	5.3%	8.1%		38.1%	1.8%
	Self-Pay (Uninsured)	72.0%	68.0%	0.0%	4.0%		40.0%	4.0%
	Unattended birth	0.0%	0.0%	30.0%	50.0%		20.0%	10.0%
	Other	80.0%	80.0%	0.0%	0.0%		20.0%	20.0%
Yolo County Totals		83.1%	78.1%	5.3%	7.3%	42.5%	37.1%	4.0%
California Totals (2013)		81.2%	n/a	6.7%	8.8%	n/a	39.1%	6.2%

% 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 Health Department, 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, 2014.

	Number of Births to Females Age 15-19	Yolo County Teen Birth Rate per 1,000*	California Teen Birth Rate (2013)
African American/Black	5	22.8	36.0
American Indian/Alaska Native	0	0.0	63.0
Asian	0	0.0	7.1
Hispanic	67	20.8	33.5
Pacific Islander	0	0.0	N/A
White	23	5.9	10.3
More Than One Race	0	0.0	N/A
Missing	2	N/A	N/A
All Teen Births	97	9.8	22.9
All Non-White	72	12.1	28.2

Table 2-B. Teen Birth Rates by Maternal City of Residence, Yolo County Residents, 2014.

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	<5	**	**	**
West Sacramento	35	17.7	27.3	10.0
Woodland	50	19.5	29.5	7.2
Winters & Unincorporated Areas	10*	2.6	10.7	**
Winters	<5	**	**	**
Yolo County Total	97	9.8	20.8	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 Health Department, 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).

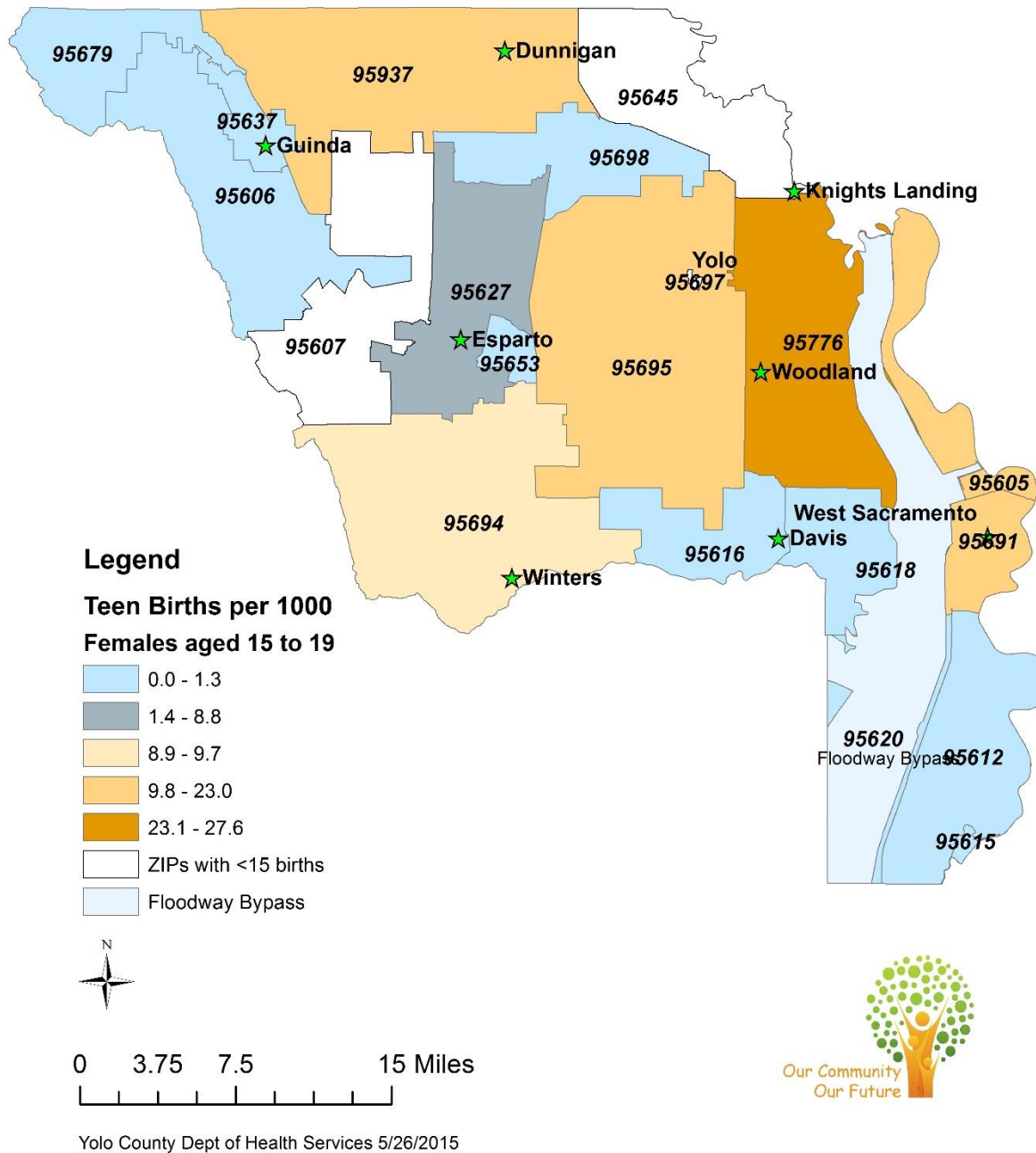


Figure 1. Teen Live Birth Rates (per 1000 Females aged 15 to 19) by ZIP code, Yolo County, 2014.

Table 2-C. Teen Births by Age Group, Yolo County, 2009 to 2014.

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

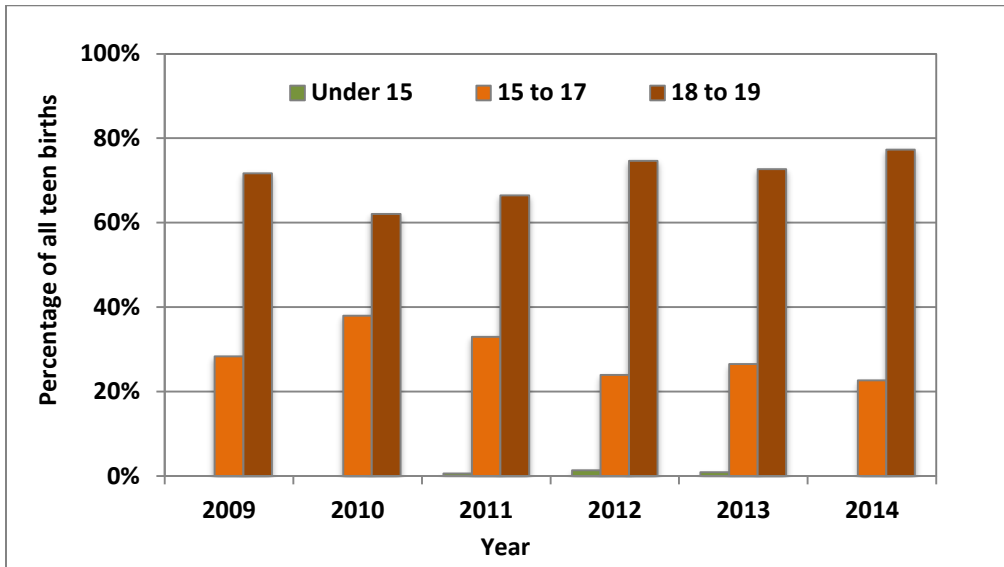


Figure 2. Percentage of Yolo County Live Births to Teens by Age Group, 2009 to 2014.

Table 3. Summary Statistics of Resident Live Births, Yolo County 2011 to 2014.

Variable	Classification	2011	2012	2013	2014
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	48	61	69	67
	American Indian/Alaska Native	11	19	16	19
	Asian	252	204	179	193
	Hispanic	954	982	994	952
	Pacific Islander	15	45	42	54
	White	965	1054	1092	994
	Other/More Than One Race	65	65	70	85
	Unknown/declined	28	43	51	45
Maternal Age Group (years)	Under 15	<5	<5	<5	0
	15 to 17	54	35	31	22
	18 to 19	109	109	85	75
	20 to 24	419	424	429	405
	25 to 34	1328	1442	1477	1401
	35 to 44	413	457	483	499
	45 & Older	13	<5	7	7
Maternal education	0-8 years	99	106	85	96
	9-11 years	243	220	176	188
	12 or more years	1893	2020	2122	1986
	Unknown/declined	--	127	130	139
Entry into Prenatal Care	First trimester	1897	2033	2042	2003
	After first trimester	395	381	444	370
	Never	7	10	7	10
Adequacy of PNC Utilization	Adequate or better	1888	2031	2041	1882
	Intermediate or Inadequate	443	390	451	519
Payment Source for Delivery	Medi-Cal	984	1021	1074	1025
	Private Insurance	1311	1402	1390	1338
	Self-pay (uninsured)	13	22	29	25
	Medically unattended birth	<5	10	7	10
	Other	25	13	12	5
Method of Delivery	Vaginal Delivery	1757	1848	1867	1823
	C-Section	581	625	646	586
Birth Weight (grams)	Less than 1,500	24	16	24	28
	1,500 to 2,499	124	117	132	100
	2,500 to 3,999	1932	2043	2047	1951
	4,000 & Above	257	297	310	325
Multiple Gestation	Singleton	2263	2389	2430	2319
	Twin or more	92	84	83	90
Gestational Age	Preterm (less than 37 weeks)	201	193	201	176
	Near-Term, Full-Term or Overdue	2136	2280	2312	2233
Total Live Births		2338	2473	2513	2409

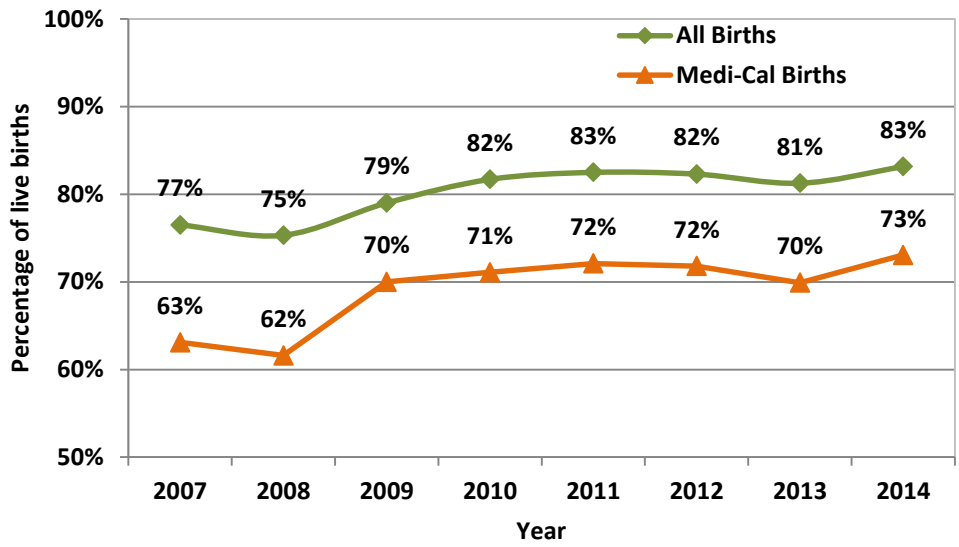


Figure 3. Percentage of Yolo County Live Births with 1st-Trimester Prenatal Care, 2007 to 2014.

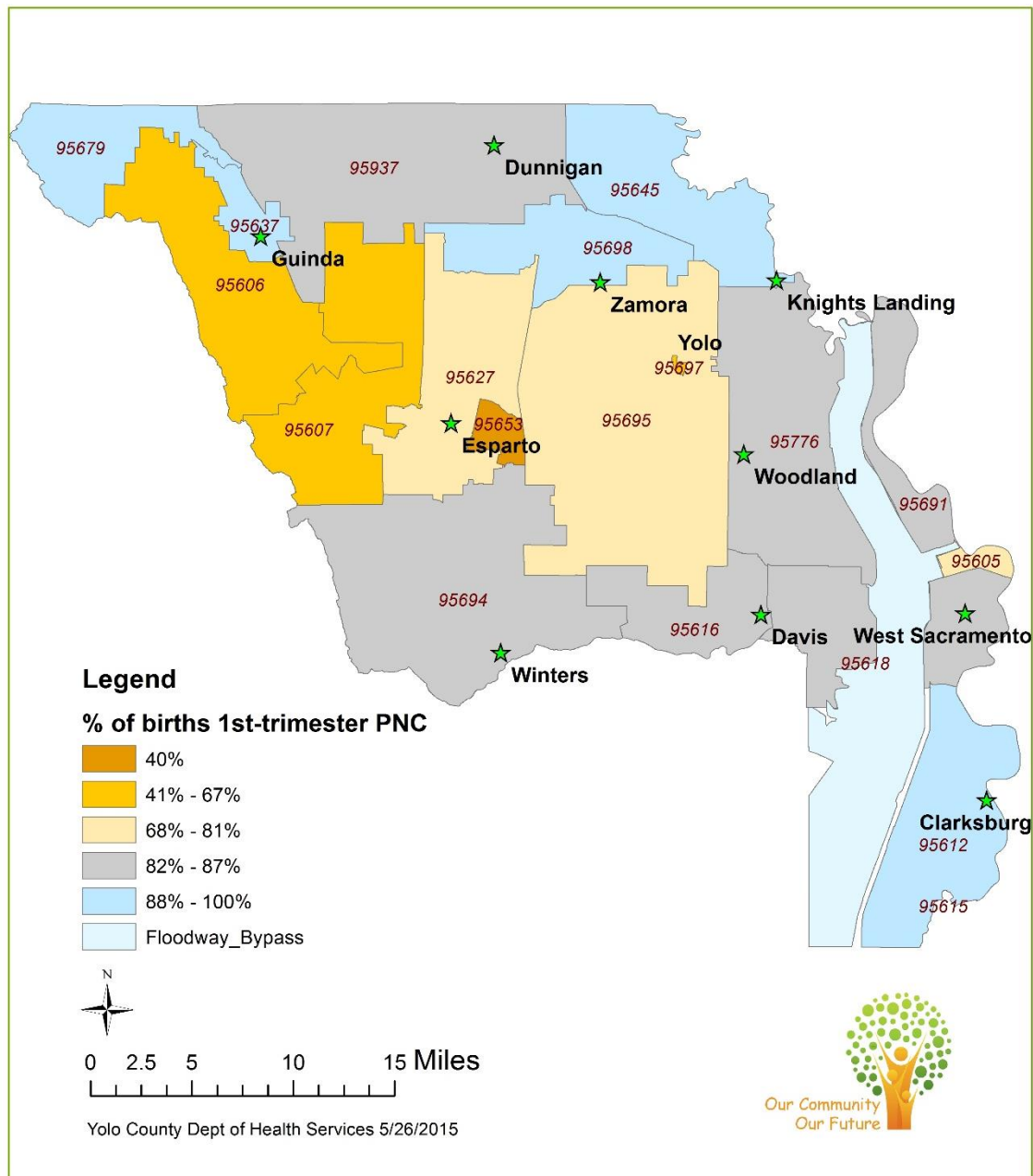


Figure 4. Percentage of Live Births with 1st-Trimester Prenatal Care by ZIP code, Yolo County 2014.

Table 4. Resident Live Births by Maternal Age Group (years) for Mothers <25, Yolo County, 2014.

Variable	Classification	<15	15-17	18-19	20-24	All Live Births
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black			5	19	67
	American Indian/Alaska Native				<5	19
	Asian				10	193
	Hispanic		17	50	230	952
	Pacific Islander				<5	54
	White		5	18	120	994
	Other/More Than One Race				14	85
	Unknown/declined			<5	9	45
Parity	Primiparous (first birth)		22	62	234	893
	Primiparous receiving Medi-Cal		14	42	159	363
	Multiparous (more than one birth)			13	171	1513
Maternal education	0-8 yr			<5	9	96
	9-12 yr (no HS diploma/GED)		18	19	34	188
	HS diploma/GED		<5	38	175	564
	College (no degree)			13	131	588
	College degree				21	834
	Unknown/declined		<5	<5	35	139
Entry into Prenatal Care	First trimester		17	58	298	2003
	After first trimester		5	13	98	370
	Never			<5	<5	10
	Unknown			<5	5	26
Adequacy of PNC Utilization	Adequate or better		16	54	288	1882
	Intermediate or Inadequate		6	29	114	519
	Unknown			<5	<5	8
Payment Source for Delivery	Medi-Cal		14	54	271	1025
	Private Insurance		8	18	129	1338
	Medically unattended birth			<5	<5	10
	Self-pay (uninsured)			<5		25
	Other/Unknown			<5	<5	11
Method of Delivery	Vaginal Delivery		22	66	322	1823
	C-Section			9	83	586
Birth Weight (grams)	Less than 1,500			<5	8	28
	1,500 to 2,499		<5	3	15	100
	2,500 to 3,999		17	62	333	1951
	4,000 & Above		<5	9	49	325
Gestational Age	Preterm (less than 37 weeks)			<5	33	176
	Near-Term, Full-Term or Overdue		22	72	372	2233
	Total Live Births		0	22	75	405

Table 5. Resident Live Births by Maternal City of Residence, Yolo County, 2014.

Variable	Classification	Davis (ZIPs 95616, 95617, 95618)	West Sacramento (ZIPs 95605, 95691, 95798, 95799)	Winters (ZIP 95694)	Woodland (ZIPs 95695 & 95776)	All Other Places
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	16	31	<5	15	<5
	American Indian/Alaska Native	<5	<5		<5	7
	Asian	102	59	<5	24	5
	Hispanic	75	240	64	482	91
	Pacific Islander	<10	35	<5	<10	<5
	White	260	343	50	298	43
	Other/More Than One Race	<10	31	<5	44	<5
	Unknown/Declined	16	12	<5	13	<5
Parity	Primiparous (first birth)	212	265	43	322	51
	Multiparous (more than one birth)	275	490	81	566	101
Maternal education (excludes unknown/ declined)	0-8 yr	14	18	9	39	16
	9-12 yr (no HS diploma/GED)	12	60	13	87	16
	HS diploma/GED	29	193	31	268	43
	College (no degree)	61	194	37	259	37
	College degree	352	236	28	193	25
Entry into Prenatal Care (excludes missing)	First trimester	420	631	107	720	125
	After first trimester	63	110	17	152	28
	Never	<5	<5		<10	
Adequacy of PNC Utilization	Adequate or better	385	593	95	685	124
	Intermediate or Inadequate	102	158	29	201	29
Payment Source for Delivery	Medi-Cal	125	328	55	430	87
	Private Insurance	352	415	67	441	63
	Medically unattended birth	<5	<5	<5	<10	<5
	Self-pay (uninsured)	7	<5	<5	10	<5
	Other	<5	<5		<5	<5
Method of Delivery	Vaginal Delivery	399	560	95	660	109
	C-Section	89	195	29	229	44
Birth Weight (grams)	Less than 1,500	<5	10	<5	10	<5
	1,500 to 2,499	24	28	<5	43	<5
	2,500 to 3,999	399	611	107	711	123
	4,000 & Above	63	106	12	125	24
Gestational Age	Preterm (less than 37 weeks)	37	47	8	77	7
	Near-Term, Full-Term or Overdue	451	708	116	812	146
	Total Live Births	488	755	124	889	153

Table 6. Trends in Selected Maternal Health Conditions Present during Pregnancy, Yolo County, 2009-2014.

Condition/Illness	2009	2010	2011	2012	2013	2014	Trend
Gestational diabetes mellitus	8.4%	6.9%	8.8%	10.5%	8.9%	7.6%	No
Gestational hypertension	3.2%	2.8%	3.1%	2.7%	3.9%	4.2%	No
Hepatitis B (acute/carrier)	0.3%	0.4%	0.4%	0.3%	0.3%	0.6%	No
Chlamydia	0.6%	0.2%	0.4%	0.6%	0.4%	0.6%	No
Herpes simplex virus (HSV)	1.1%	1.4%	1.2%	1.8%	1.3%	1.3%	No
Smoking	2.7%	2.8%	2.0%	2.2%	2.6%	2.1%	No
Obesity (BMI>30)	19.6%	20.2%	20.4%	21.3%	24.2%	22.8%	Yes
Morbid obesity (BMI>40)	2.9%	3.5%	3.1%	3.6%	4.1%	3.9%	Yes

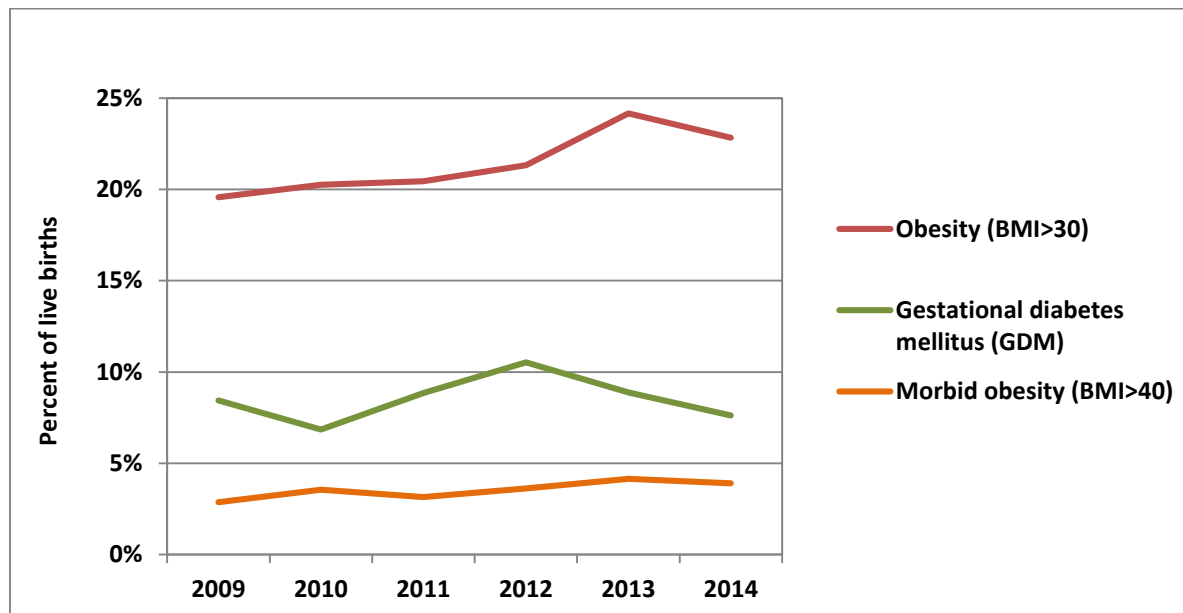


Figure 5. Percentage of Live Births with Maternal Obesity, Morbid Obesity or GDM, Yolo County, 2009-2014.

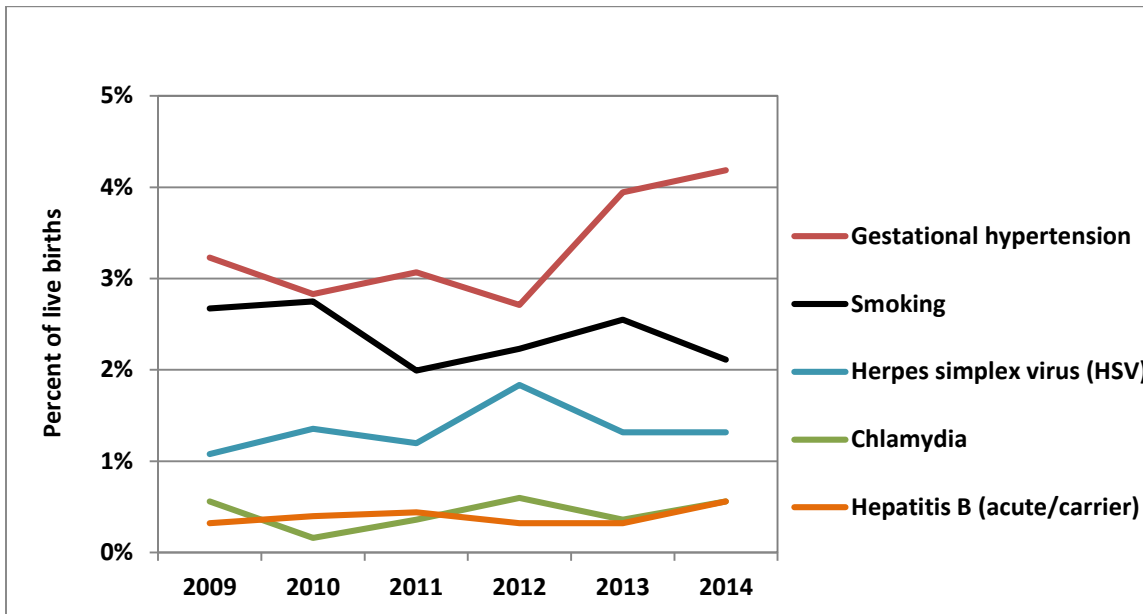


Figure 6. Percentage of Live Births with Selected Maternal Health Conditions, Yolo County, 2009-2014.