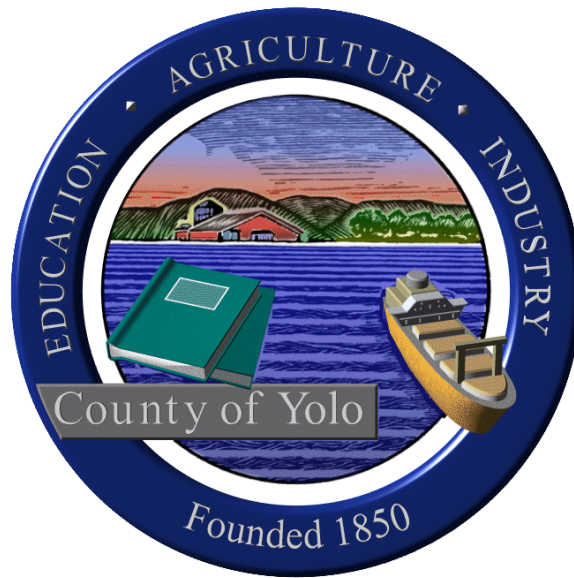


LIVE BIRTH PROFILE PUBLIC

YOLO COUNTY 2013



LIVE BIRTH PROFILE, YOLO COUNTY, 2013

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Executive Summary

The number of births to Yolo County mothers (n=2,513 in 2013) is consistent with the past three or four years, at around 2,500 live births per year. There was a notable increase of about 25% in the total number of live births to mothers residing in the city of Winters (n=127 in 2013), which for the prior several years had been around 100 per year. Early entry into prenatal care (PNC) in the first three months (trimester) of pregnancy has been stable since 2010 at around 81% of all live births and exceeds the Healthy People (HP) 2020 target of 77.9%. However, there are disparities for low-income women on MediCal, of whom only 70% received PNC in the first trimester, and younger women (only 65% of teens aged 15 to 19 received first-trimester PNC).

On a positive note, the teen birth rate continued its decline from 16.9 births per 1,000 females aged 15 to 19 years in 2007 to 13.0 births per 1,000 in 2013. Yolo County's rate remains significantly lower than the state. The most striking decrease in the teen birth rate occurred among Hispanics, from a rate of 52.4 per 1,000 in 2007 to 25.9 per 1,000 in 2013, and it also declined in 2013 compared to 2012 among Non-Hispanic (NH)-white teens. The largest number of teen births occurred in West Sacramento (n=38) and Woodland (n=56).

There was no trend in the proportion of preterm births (<37 weeks) or low birth weight births (<2,500 grams). West Sacramento mothers had the highest percentage of low birth weight births (8.4%) compared to other geographic areas of the county. The overall C-section rate of 26% for births to Yolo County mothers was significantly lower than the statewide rate of 33%, and it was even lower (21%) for resident births occurring at the two in-county hospitals.

Obesity continues to be an issue for Yolo County mothers. It is of concern during pregnancy since it increases the risk for gestational diabetes mellitus (GDM), C-section, preterm birth, and complications during delivery. Such associations have been identified in Yolo County birth data, but are not presented here. The number of mothers (about half of the total) who were overweight or obese (body mass index [BMI] ≥ 25) demonstrated an upward linear trend ($p^2=0.86$) between 2007 and 2013. The trend was also significant for both NH-white and Hispanic mothers analyzed as separate groups. Furthermore, there were strong upward linear trends for women in the obese (BMI ≥ 30) and morbidly obese (BMI ≥ 40) categories. The city of Davis had the lowest percentage of obese mothers (13%) compared to all other cities and areas, where obesity ranged from 27% to 31%.

Table 1. Selected Birth Outcomes for Resident Live Births, 2013.

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	73.9%	65.2%	17.4%	15.9%	59.4%	37.7%	11.6%
	Asian/Pacific Islander	78.7%	77.4%	6.8%	8.6%	29.9%	50.7%	0.9%
	Hispanic	77.7%	76.9%	5.7%	7.3%	61.3%	36.2%	8.5%
	White	86.6%	78.4%	5.5%	7.7%	26.1%	41.8%	1.6%
Maternal age group (years)	15 to 19	65.0%	63.2%	7.7%	10.3%	63.2%	82.9%	
	20 to 24	70.4%	72.7%	6.3%	5.4%	67.6%	54.1%	
	25 and older	84.0%	84.1%	4.9%	8.4%	35.4%	34.9%	
Maternal education	0-8 yr	70.6%	71.8%	4.7%	7.1%	90.6%	17.6%	1.2%
	9-12 yr (no HS diploma/GED)	67.7%	67.7%	7.5%	11.8%	88.7%	37.1%	24.2%
	HS diploma/GED	75.6%	75.1%	5.4%	6.6%	64.1%	35.3%	8.5%
	College (no degree)	82.5%	77.8%	7.7%	8.1%	44.0%	40.8%	2.7%
	College degree	89.6%	80.7%	5.4%	8.0%	10.2%	47.1%	0.0%
Maternal residence	Davis	84.1%	79.0%	4.3%	6.7%	22.0%	48.1%	0.8%
	West Sacramento	83.9%	75.8%	8.2%	10.1%	44.4%	40.0%	4.4%
	Winters	80.3%	71.7%	4.7%	8.7%	48.0%	40.9%	3.1%
	Woodland	77.2%	77.2%	6.1%	6.8%	49.5%	35.8%	6.4%
	Other	81.8%	81.8%	2.6%	6.5%	56.5%	44.8%	9.1%
Payment source for delivery	Medi-Cal	69.9%	72.7%	6.4%	7.8%		35.1%	8.2%
	Private Insurance	90.6%	81.2%	5.7%	7.8%		44.8%	1.7%
	Self-Pay (Uninsured)	75.9%	65.5%	6.9%	6.9%		31.0%	10.3%
	Unattended birth	0.0%	0.0%	57.1%	85.7%		42.9%	28.6%
	Other	83.3%	75.0%	0.0%	0.0%		33.3%	0.0%
Yolo County Totals		81.3%	81.2%	6.2%	8.0%	42.7%	40.4%	4.7%
California Totals (2012)		81.9%	n/a	6.7%	n/a	n/a	n/a	7.1%

% 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 pay 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 yet available online from CDPH.

Teen Births

Table 2-A. Teen Birth Rates by Maternal Race/Ethnicity, Yolo County Residents, 2013.

Race/Ethnicity (non-Hispanic unless otherwise specified)	Number of Births to Females Age 15-19	Yolo County Teen Birth Rate per 1,000	California Teen Birth Rate (2012)
African American/Black	8	**	30.8
American Indian/Alaska Native	<5	**	31.0
Asian	<5	**	5.0
Hispanic	84	25.9	38.9
Pacific Islander	0	0.0	19.7
White	18	4.6*	11.5
More Than One Race	<5	**	17.9
Missing	<5	**	N/A
All Teen Births	116	13.0	25.7
All Non-White	97	19.6	31.7

Table 2-B. Teen Birth Rates by Maternal City of Residence, Yolo County Residents, 2013.

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	1.3*	**	**
West Sacramento	38	19.2	34.8	28.0
Woodland	56	21.9	44.5	20.4
Winters & Unincorporated Areas	18	9.9*	9.8*	**
Winters	<5	13.0*	**	**
Yolo County Total	116	13.0	28.2	8.8

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 by race/ethnicity.

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).

Table 2-C. Teen Births by Age Group, Yolo County, 2009 to 2013.

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

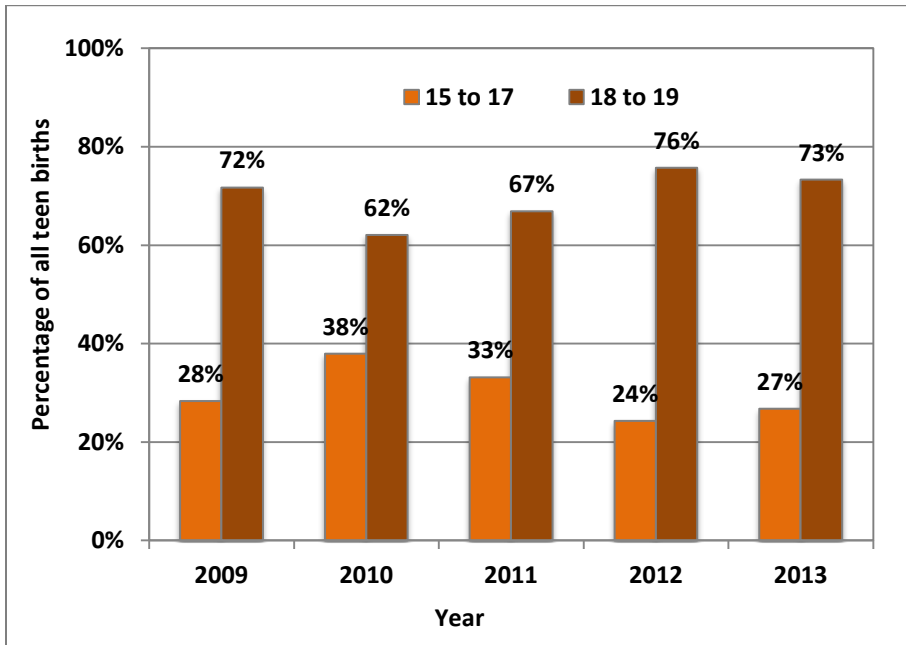


Figure 1. Percentage of Yolo County Live Births to Teens by Age Group, 2009 to 2013.

Table 3. Summary Statistics of Resident Live Births, Yolo County 2010 to 2013.

Variable	Classification	2010	2011	2012	2013
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black	48	48	61	69
	American Indian/Alaska Native	10	11	19	16
	Asian	265	252	204	179
	Hispanic	990	954	982	994
	Pacific Islander	<10	15	45	42
	White	1017	965	1054	1092
	Other/More Than One Race	50	65	65	70
	Unknown/declined	37	28	43	51
Maternal Age Group (years)	Under 15	<5	<5	<5	<5
	15 to 17	66	54	35	31
	18 to 19	108	109	109	85
	20 to 24	468	419	424	429
	25 to 34	1340	1328	1442	1477
	35 to 44	430	413	457	483
	45 & Older	13	13	<5	<5
Maternal Education	0-8 years	118	99	106	85
	9-11 years	268	243	220	176
	12 or more years	1279	1893	2020	2122
	Unknown/declined	--	--	127	130
Entry into Prenatal Care	First trimester	1952	1897	2033	2042
	After first trimester	428	395	381	444
	Never	<10	<10	10	<10
Adequacy of PNC Utilization	Adequate or better	1921	1888	2031	2041
	Intermediate or Inadequate	495	443	390	451
Payment Source for Delivery	Medi-Cal	1027	984	1021	1074
	Private Insurance	1337	1311	1402	1390
	Self-pay (uninsured)	21	13	22	29
	Medically unattended birth	<5	<5	10	<10
	Other	31	25	13	12
Method of Delivery	Vaginal Delivery	1829	1757	1848	1867
	C-Section	596	581	625	646
Birth Weight (grams)	Less than 1,500	26	24	16	24
	1,500 to 2,499	100	124	117	132
	2,500 to 3,999	1997	1932	2043	2047
	4,000 & Above	302	257	297	310
Gestational Age	Preterm (less than 37 weeks)	184	201	193	201
	Near-Term, Full-Term or Overdue	2241	2136	2280	2312
Total Live Births		2425	2338	2473	2513

Table 4. Resident Live Births by Maternal Age Group (years) for Mothers <25, Yolo County, 2013.

Variable	Classification	<15	15-17	18-19	20-24	All Live Births
Maternal race/ ethnicity (non- Hispanic unless specified otherwise)	African American/Black		<5	<10	14	69
	American Indian/Alaska Native			<5	<5	16
	Asian		<5	<5	<10	179
	Hispanic	<5	27	57	237	994
	Pacific Islander				<10	42
	White		<5	16	143	1092
	Other/More Than One Race			<5	<10	70
	Unknown/declined			<5	<10	51
Parity	Primiparous (first birth)	<5	29	67	232	1016
	Primiparous receiving Medi-Cal	<5	24	49	141	301
	Multiparous (more than one birth)		<5	18	197	1496
Maternal Education	0-8 yr		<5		<5	85
	9-12 yr (no HS diploma/GED)	<5	23	21	47	186
	HS diploma/GED		<5	46	180	590
	College (no degree)		<5	15	144	639
	College degree				25	883
	Unknown/declined		<5	<5	30	130
Entry into Prenatal Care	First trimester	<5	20	55	302	2042
	After first trimester		<10	29	121	444
	Never		<5		<5	<10
	Unknown		<5	<5	<5	20
Adequacy of PNC Utilization	Adequate or better	<5	16	57	312	2041
	Intermediate or Inadequate		<15	28	117	451
	Unknown		<5			21
Payment Source for Delivery	Medi-Cal	<5	25	62	290	1074
	Private insurance		<5	20	134	1390
	Medically unattended birth		<5		<5	29
	Self-pay (uninsured)			<5	<5	<10
	Other/unknown				<5	12
Method of Delivery	Vaginal Delivery	<5	27	68	357	1867
	C-Section		<5	17	72	646
Birth Weight (grams)	Less than 1,500					24
	1,500 to 2,499		<5	<10	27	132
	2,500 to 3,999	<5	25	75	352	2047
	4,000 & Above		<5	<5	44	310
Gestational Age	Preterm (less than 37 weeks)	<5	<10	<10	23	201
	Near-term, full-term or overdue		26	79	406	2312
Total Live Births			31	85	429	2513

Table 5. Resident Live Births by Maternal City of Residence, Yolo County, 2013.

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	15	42	0	11	<5
	American Indian/Alaska Native	<5	<10	0	<5	16
	Asian	99	51	<5	27	<5
	Hispanic	57	293	73	472	99
	Pacific Islander	<10	19	<5	<15	23
	White	280	401	49	313	49
	Other/More Than One Race	<10	28	0	33	<10
	Unknown/Declined	19	20	<5	<10	12
Parity	Primiparous (first birth)	236	344	52	315	69
	Multiparous (more than one birth)	255	516	75	565	85
Maternal Education (excl. unknown pr declined)	0-8 yr	<5	24	<15	40	<5
	9-12 yr (no HS diploma/GED)	<10	67	<10	81	20
	HS diploma/GED	35	199	34	266	56
	College (no degree)	64	232	36	262	45
	College degree	352	285	30	193	23
Entry into Prenatal Care (excl. missing)	First trimester	413	722	102	679	126
	After first trimester	74	131	24	188	27
	Never	<5	<5	<5	<5	<5
Adequacy of PNC Utilization	Adequate or better	388	653	91	679	126
	Intermediate or Inadequate	103	206	35	200	28
Payment Source for Delivery	Medi-Cal	108	382	61	436	87
	Private Insurance	373	462	62	430	63
	Medically unattended birth	0	<5	<5	<5	0
	Self-pay (uninsured)	10	<5	<5	<10	<5
	Other	0	<10	0	<5	0
Method of Delivery	Vaginal Delivery	382	610	97	677	101
	C-Section	109	251	30	203	53
Birth Weight (grams)	Less than 1,500	<5	16	<5	<5	<5
	1,500 to 2,499	20	55	<5	50	<5
	2,500 to 3,999	412	677	104	718	136
	4,000 & Above	58	113	17	108	14
Gestational Age	Preterm (less than 37 weeks)	33	87	11	60	10
	Near-Term, Full-Term or Overdue	458	774	116	820	144
Total Live Births		491	861	127	880	154

Table 6. Trends in Selected Maternal Health Conditions Present during Pregnancy, Yolo County, 2009-2013.

Condition/Illness	% in 2009	% in 2010	% in 2011	% in 2012	% in 2013	Total 2009-13
Gestational diabetes mellitus	8.4%	6.9%	8.8%	10.5%	8.9%	1093
Gestational hypertension	3.2%	2.8%	3.1%	2.7%	3.9%	396
Hepatitis B (acute/carrier)	0.3%	0.4%	0.4%	0.3%	0.3%	45
Chlamydia	0.6%	0.2%	0.4%	0.6%	0.4%	51
Herpes simplex virus (HSV)	1.1%	1.4%	1.2%	1.8%	1.3%	170
Smoking	2.7%	2.8%	2.0%	2.2%	2.6%	306
Obesity (BMI≥30)	19.6%	20.2%	20.4%	21.3%	24.2%	2653
Morbid obesity (BMI≥40)	2.9%	3.5%	3.1%	3.6%	4.1%	435

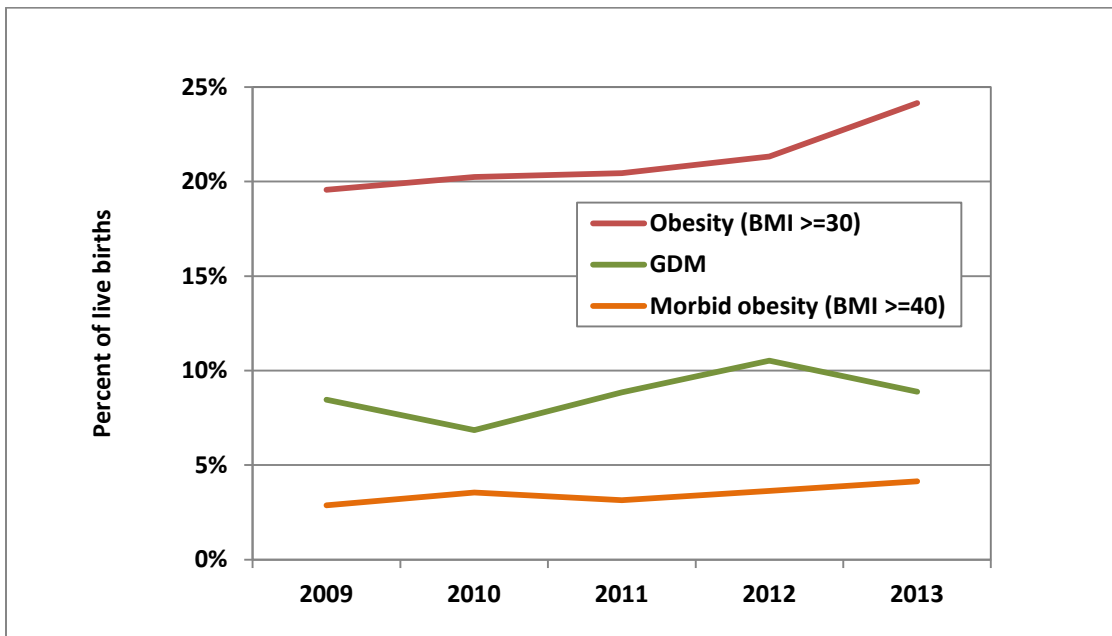


Figure 2. Percentage of Live Births with Maternal Obesity, Morbid Obesity or GDM, Yolo County, 2009-2013.

The only conditions with significant increasing trends were obesity (R-squared=0.82) and morbid obesity (R-squared=0.73).

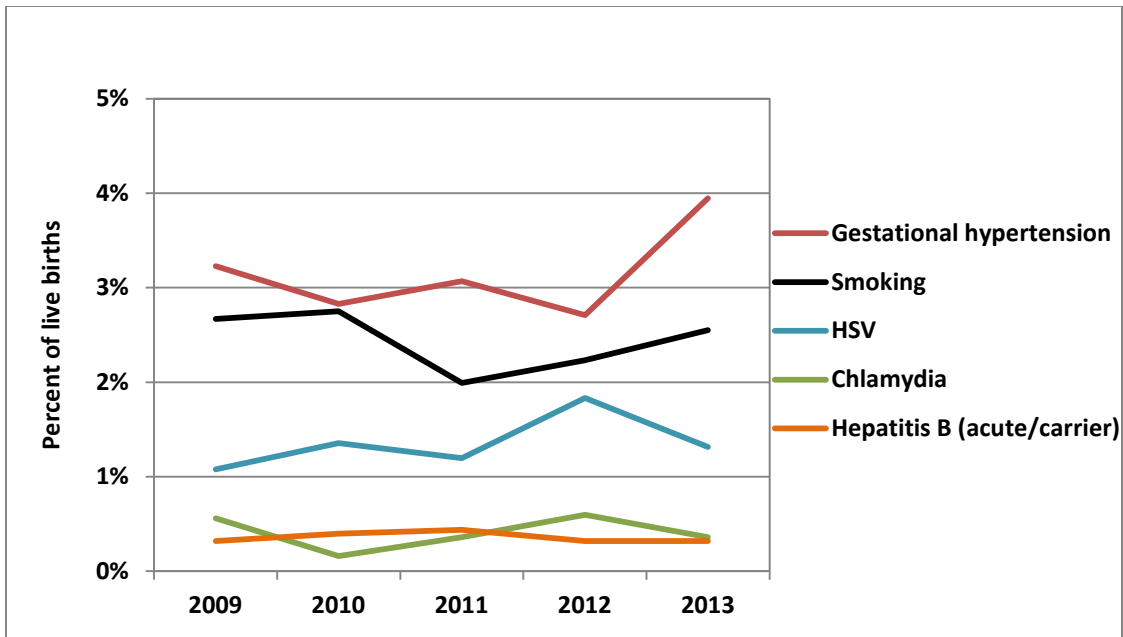


Figure 3. Percentage of Live Births with Selected Maternal Health Conditions, Yolo County, 2009-2013.

There were no significant trends among the other health conditions.