

Maternal Child and Adolescent Health Indicators

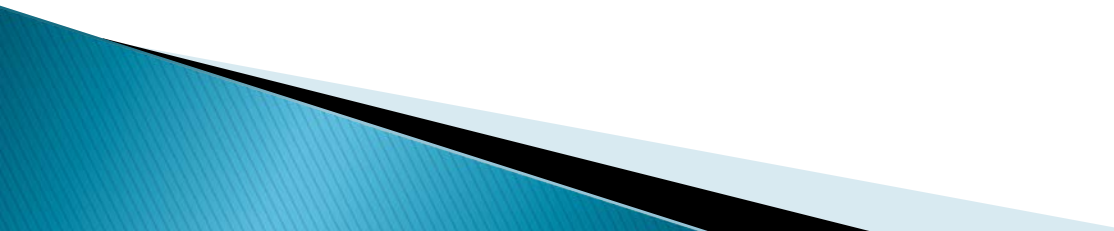
MCAH Advisory Board Retreat
January 17, 2018

Haydee Dabritz, PhD, Epidemiologist
Yolo County HHSA
Community Health Branch

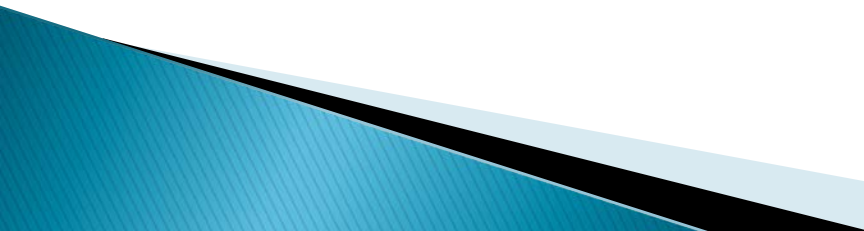
Health Indicators over the Life Course



Why Use Public Health Indicators?

- ▶ Reflect the state of health in a defined population
 - ▶ Show larger issues that may require action
 - ▶ Allow comparisons to State data and between subgroups
 - ▶ Enable analysis of trends and progress towards goals (such as Healthy People 2020)
 - ▶ Help identify upstream issues
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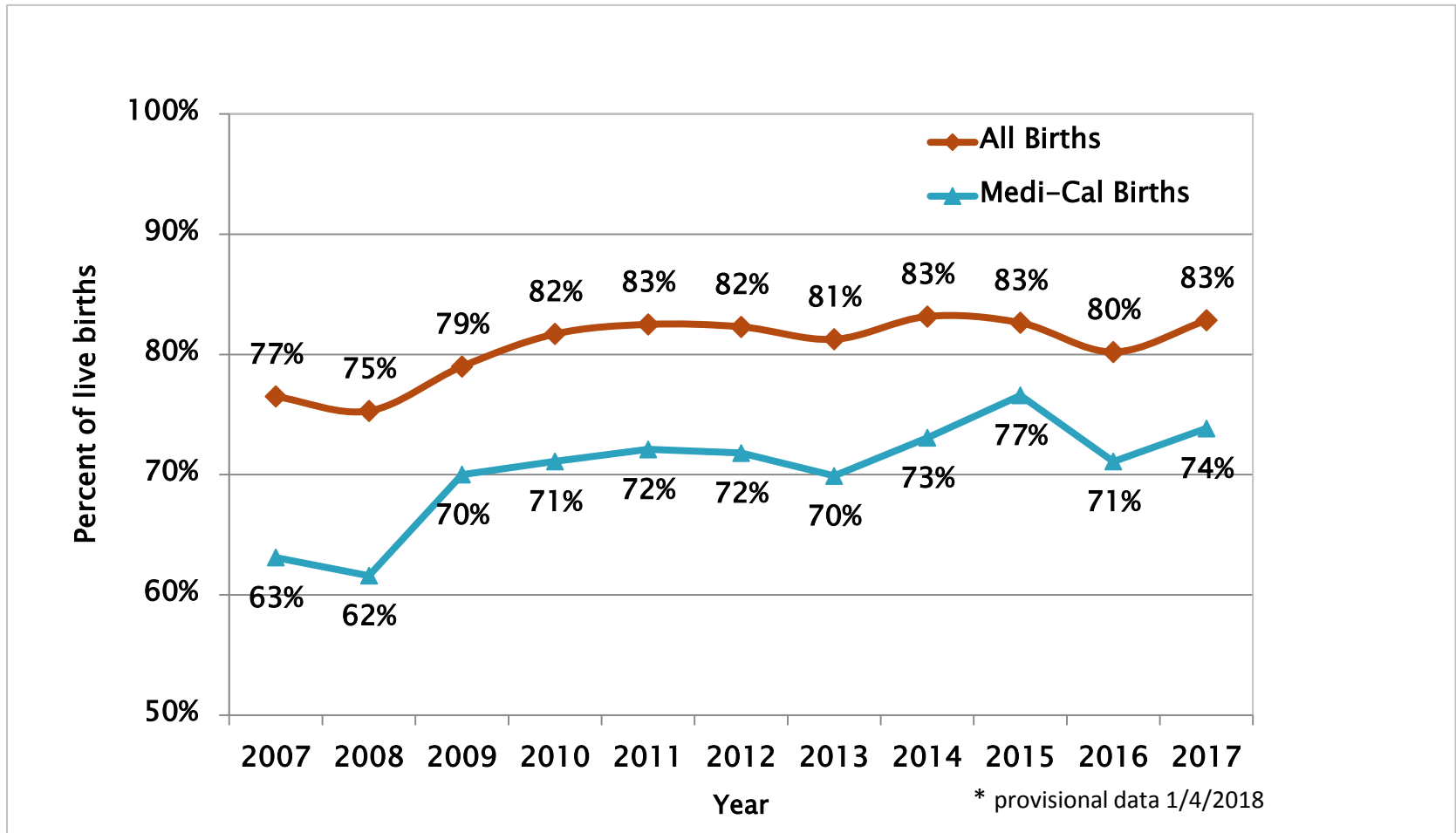
Life Course Approach

- ▶ What happens at the **start of life** affects everything else
 - ▶ Different indicators are important at different stages of growth and development
 - ▶ **Poverty and place** play major roles
 - ▶ Early childhood reading, high school graduation, teen pregnancy – many implications for health as an adult
 - ▶ We **welcome input** about trends or issues you think we should be tracking
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Perinatal Indicators

- » Prenatal Care
- Mental Health/Substance Use
- Hospitalizations
- Preterm/Low Birthweight Births
- Obesity and GDM

1st Trimester Entry into Prenatal Care, Yolo County Resident Live Births, 2007–2017

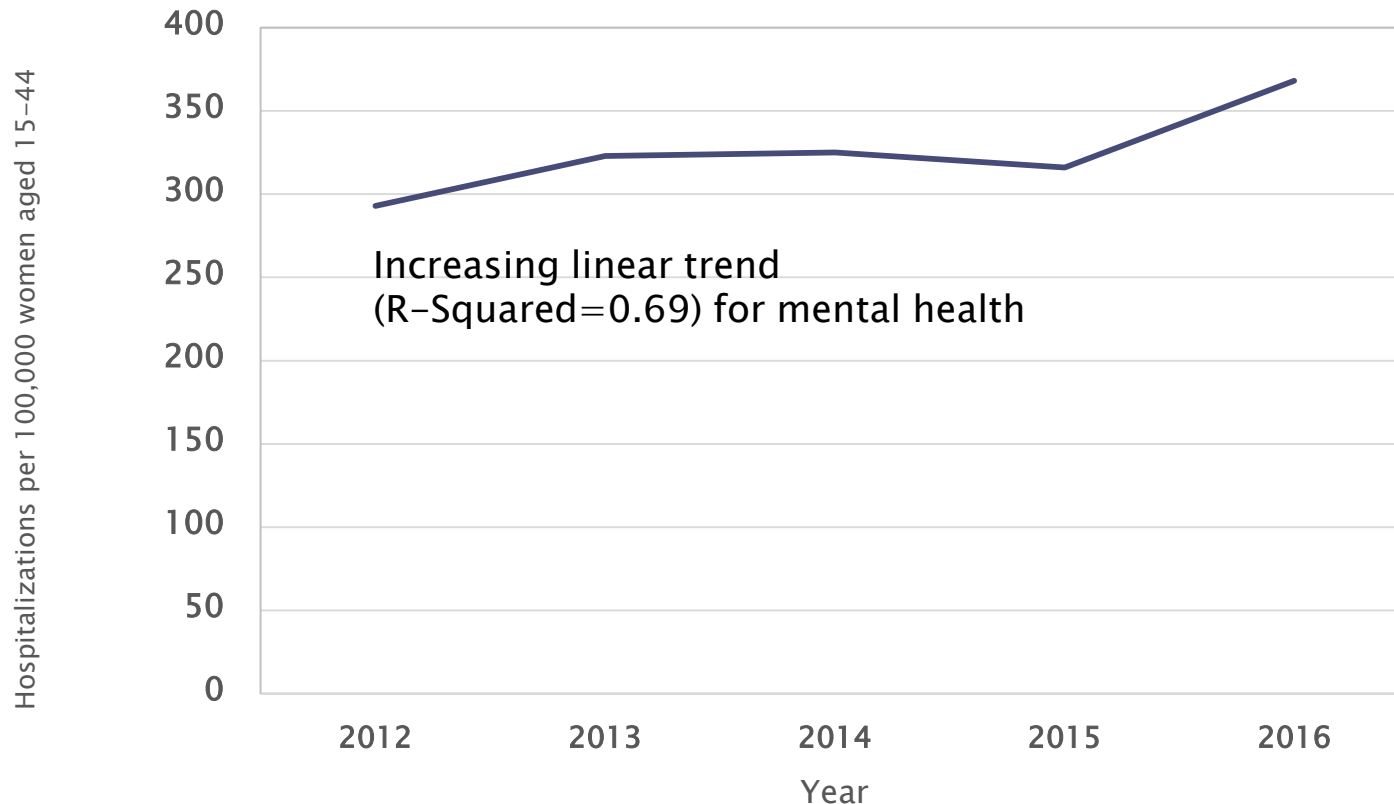


Source: Yolo County HHSA Community Health Branch, Birth Records

Prenatal Care Disparities

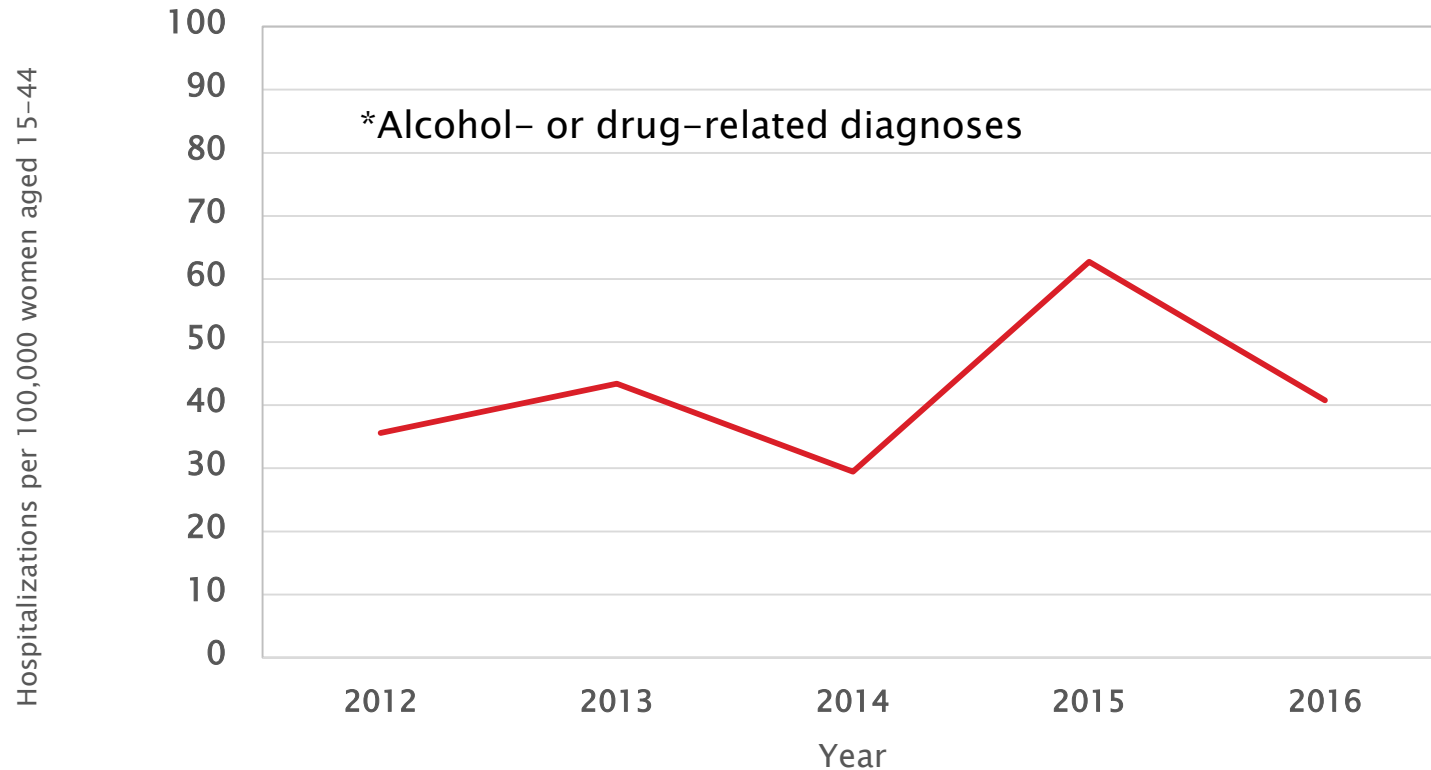
- ▶ Women with Medi-Cal insurance significantly later entry into care than women with private insurance.

Mental Health Hospitalization Rate (Major Diagnostic Category=19), Women Aged 15 to 44, Yolo County, 2012–2016



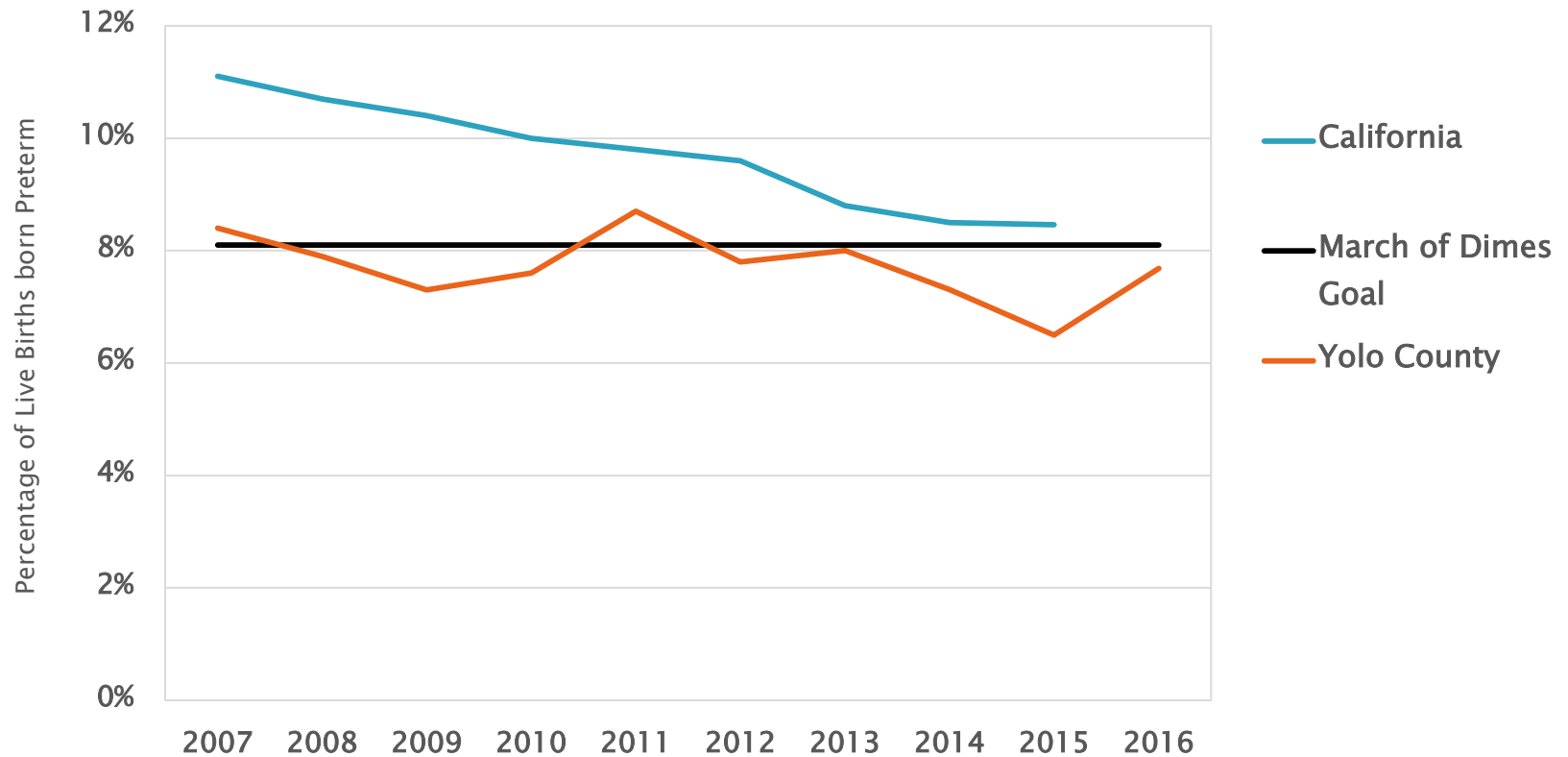
Source: Office of Statewide Planning and Development (OSHPD), Patient Discharge Data, Yolo County residents

Substance Abuse* Hospitalization Rate (Major Diagnostic Category=20), Women Aged 15 to 44, Yolo County, 2012–2016



Source: Office of Statewide Planning and Development (OSHPD), Patient Discharge Data, Yolo County residents

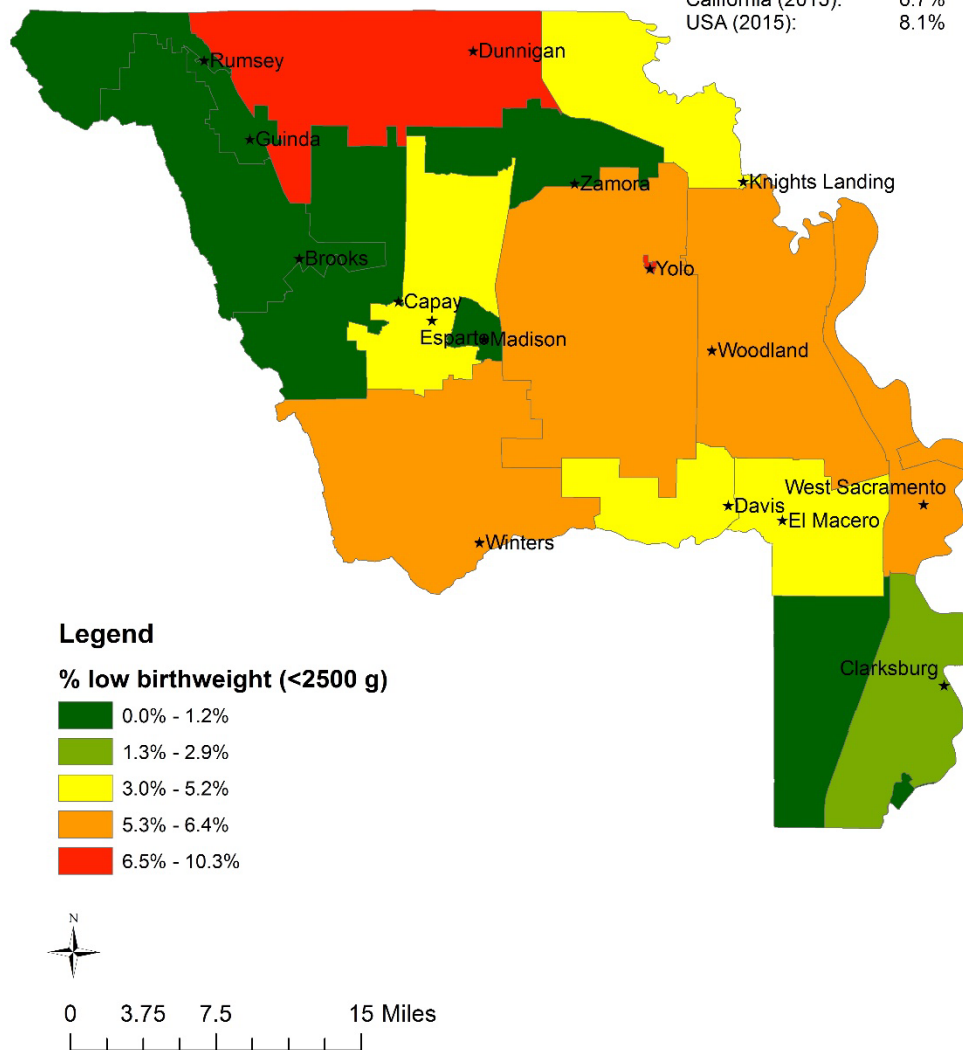
Percent of Births Preterm (<37 wks), Yolo County Resident Live Births, 2007–2016



Source: Yolo County HHSA Community Health Branch, Live Births.

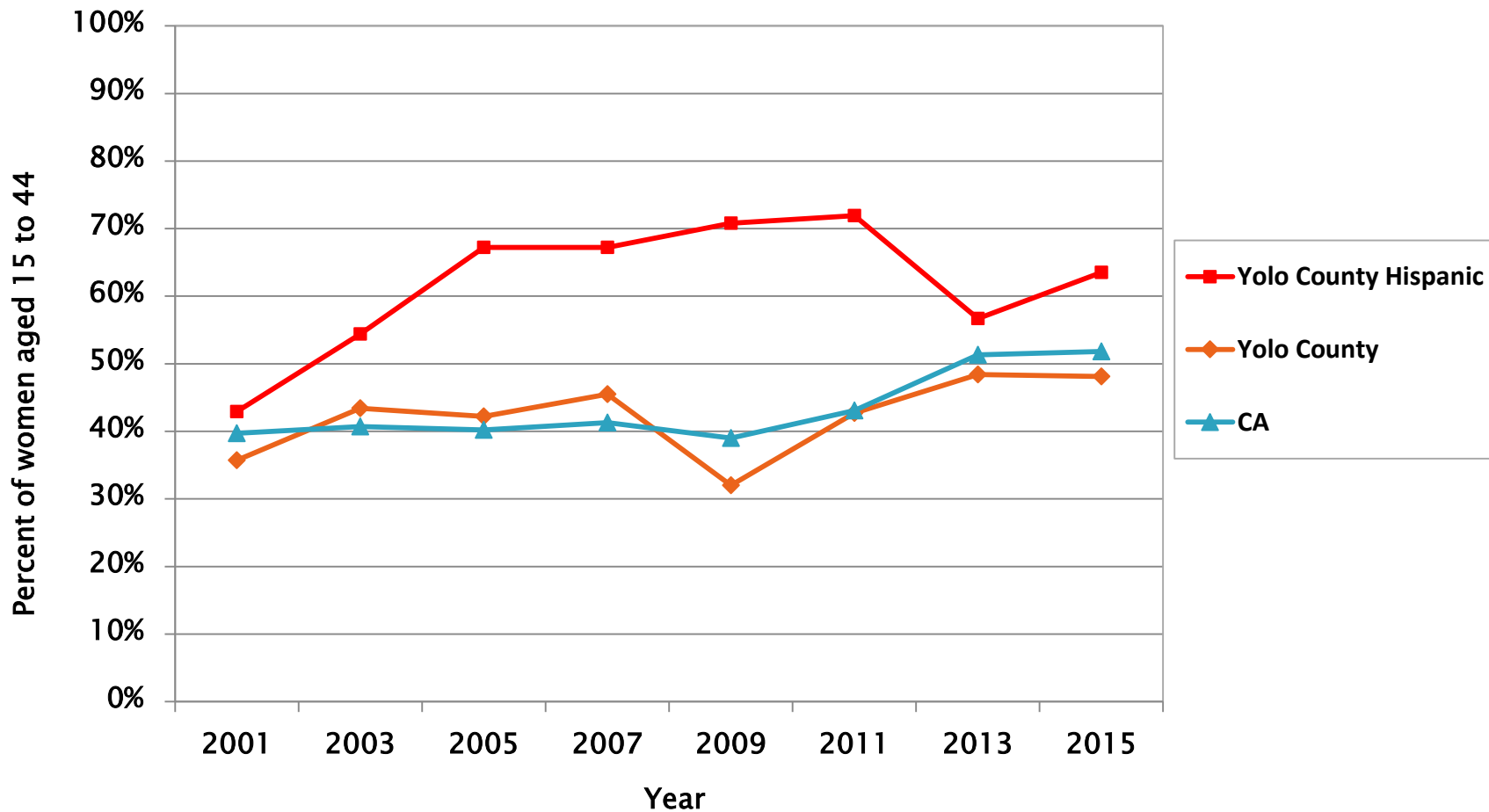
Percent of Births with Low Birthweight by ZIP Code, Yolo County, 2012-2016

County vs. state and the USA:
 County overall (2016): 6.3%
 California (2015): 6.7%
 USA (2015): 8.1%



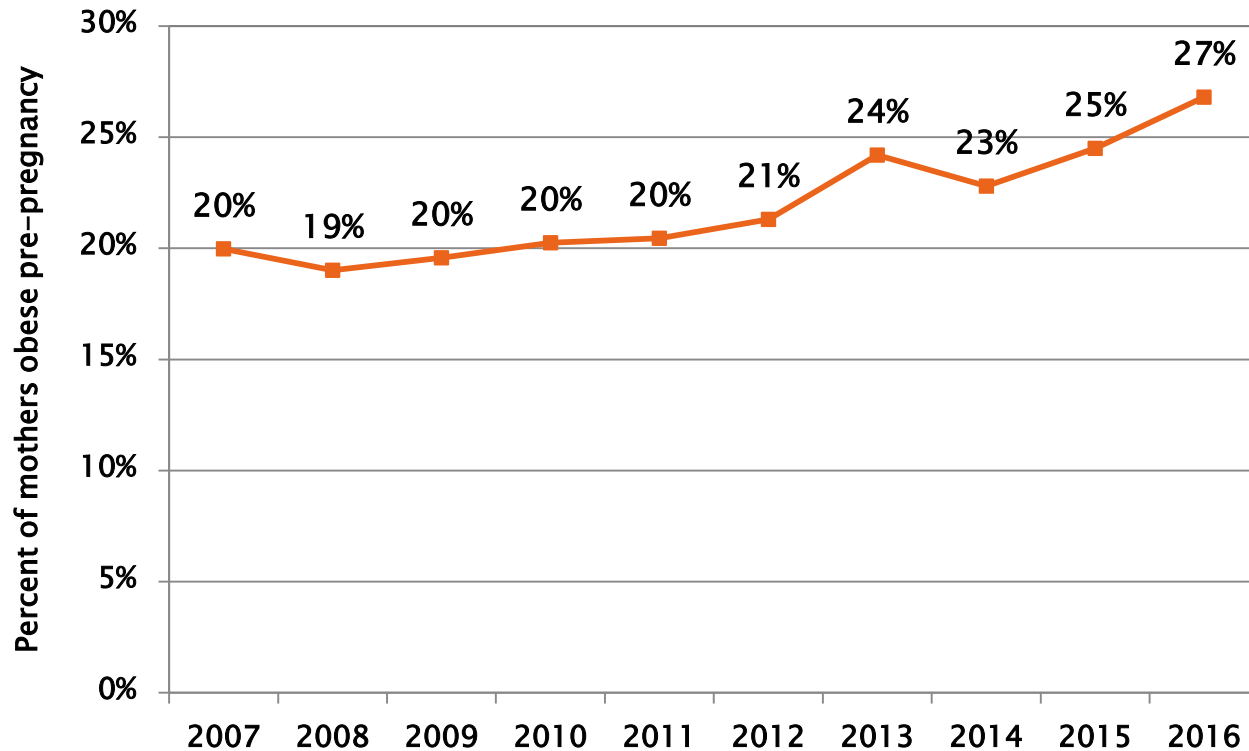
Source: Yolo County HHSA Community Health Branch, Live Births

Percent of Women Aged 15–44 Overweight or Obese (BMI ≥ 25), 2001–2015(16)



Source: California Health Interview Survey

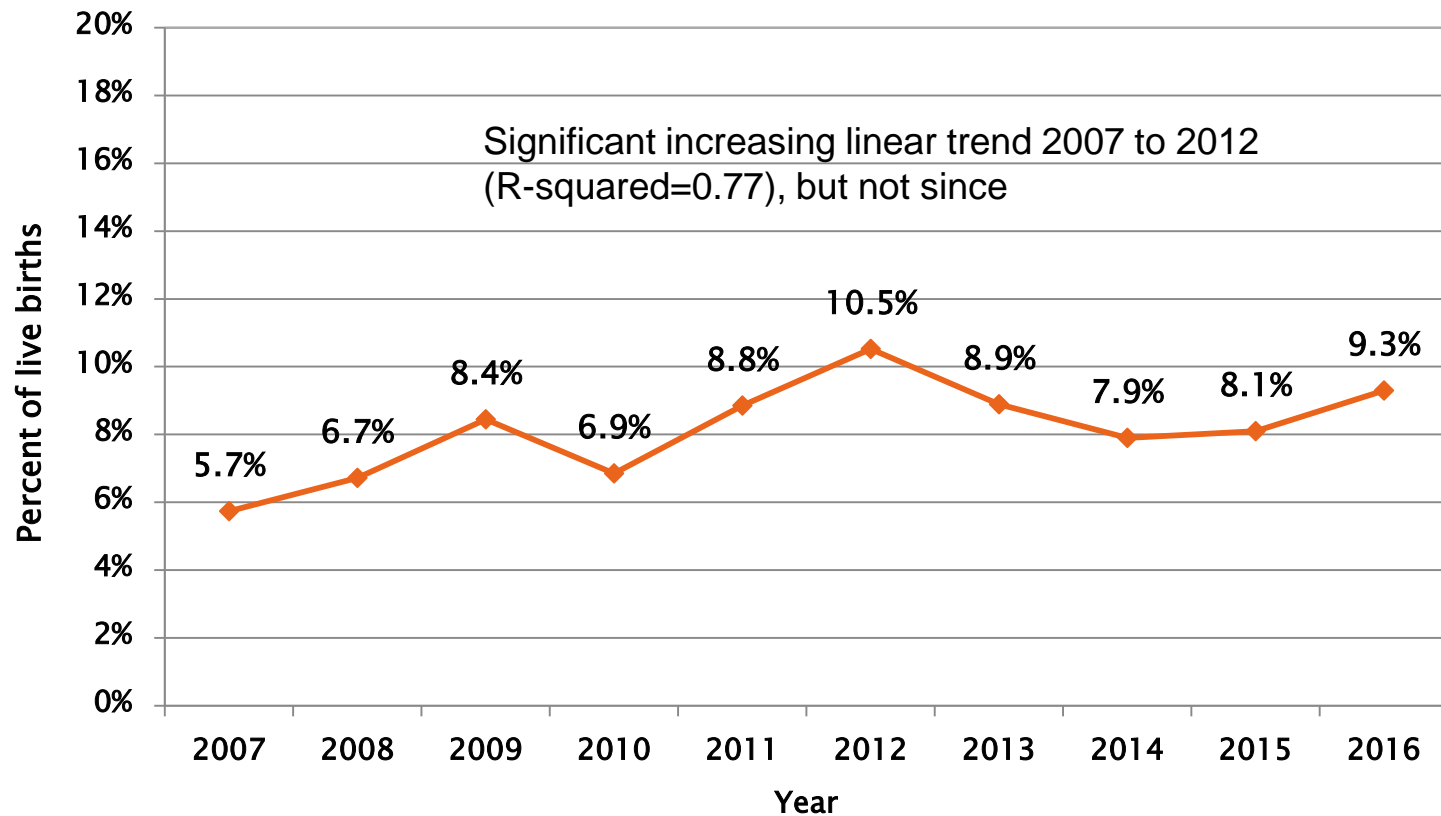
Percent of Yolo County Mothers with Pre-Pregnancy BMI ≥ 30 (Obese), 2007–2016



Significant for increasing trend (R squared=0.81)

Source: Yolo County HHSA Community Health Branch, Live Births

Percent of Yolo County Births with Gestational Diabetes as a Complicating Factor, 2007–2016

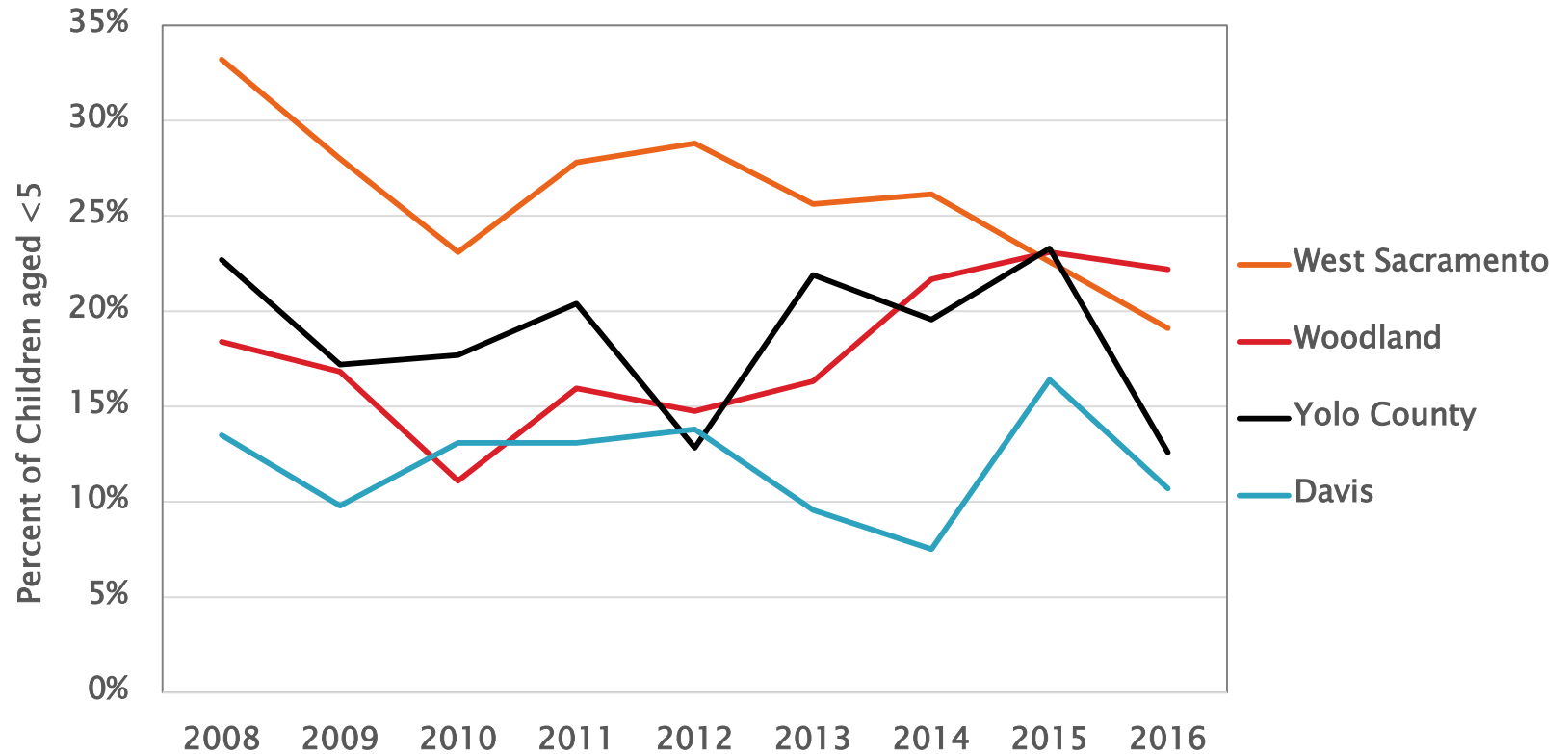


Source: Yolo County HHSA Community Health Branch, Live Births

Early Childhood (Age 0 to 4) Indicators

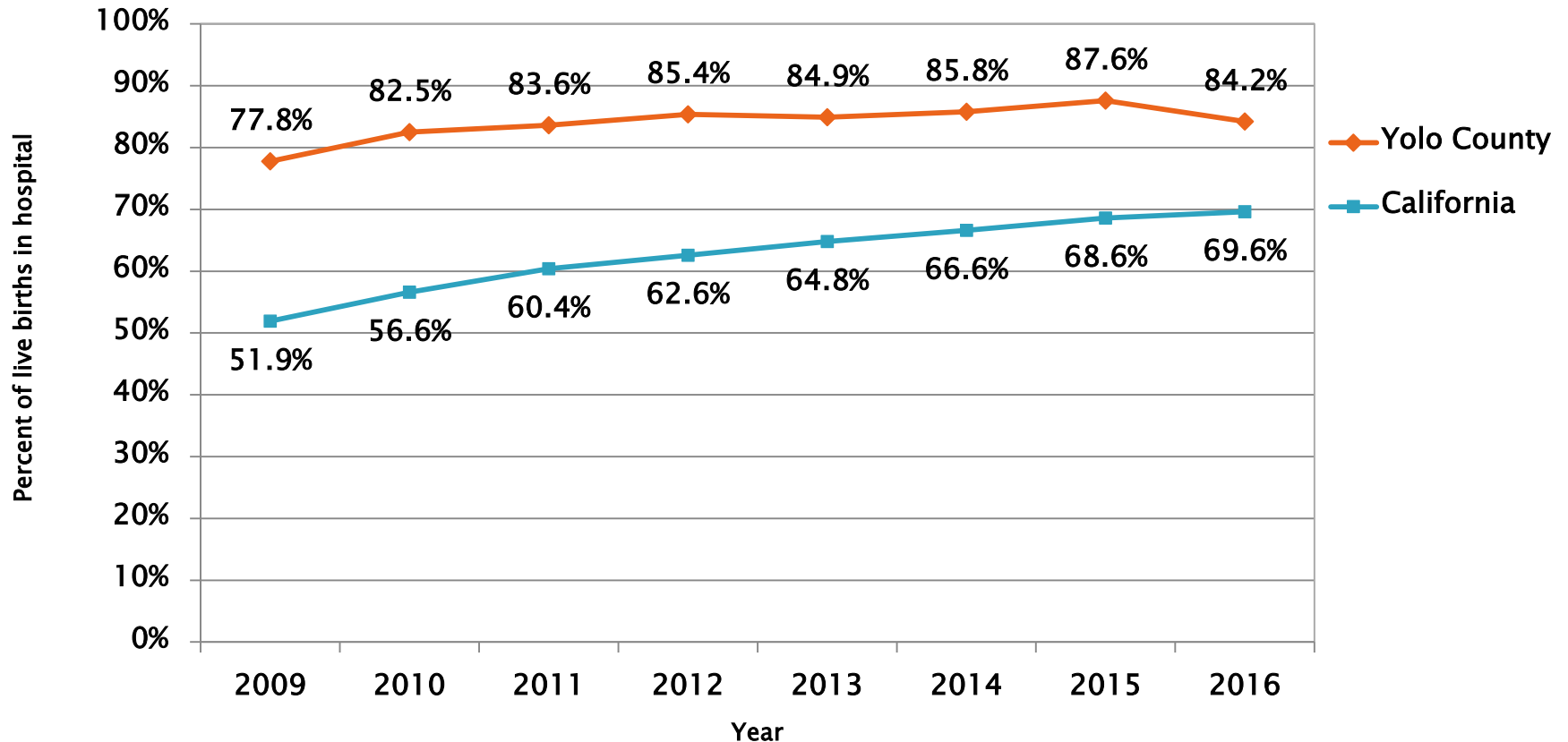
- » Early Childhood Poverty
- Breastfeeding Rates
- Infant Mortality
- Preschool Vaccinations
- Preschool Obesity

Percent of Yolo County Children <5 years at or below 100% of FPL by City, 2008–2016



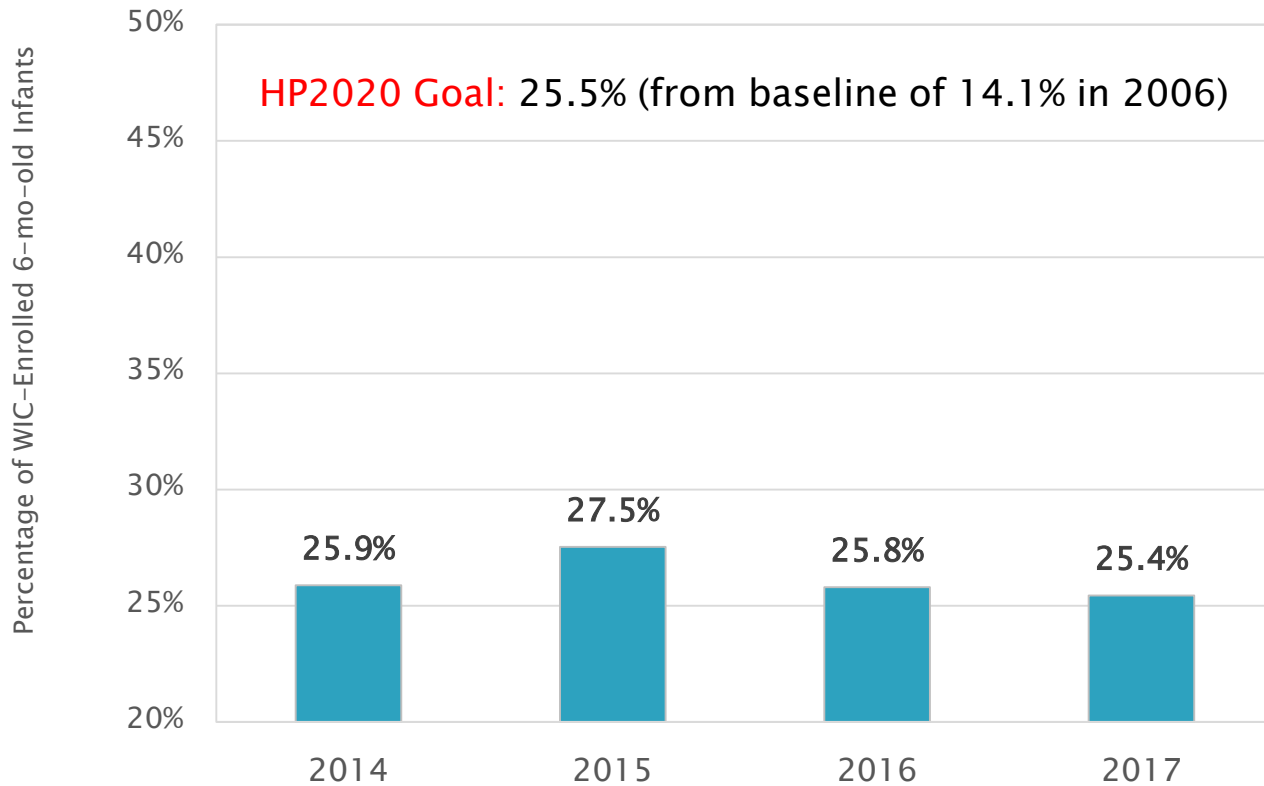
Source: American Community Survey, US Census Bureau, 2012–2016 five-yr estimates

Percent of Infants Exclusively Breastfed in the Hospital, Yolo County vs. CA 2009–2016



Source: California Department of Public Health, MCAH Program, Hospital Exit Breastfeeding Statistics

Exclusive Breastfeeding Rates at 6 mos old, Yolo County WIC Program, 2014–2017



Source: Yolo County WIC Program, Raptor database

Infant Mortality Rates (per 1,000 Live Births)

Description	Yolo 2007-11	Yolo 2012-16	CA 2012-2016	HP 2020 Goal
No. live births	12,391	12,130	2,481,914	
Early neonatal deaths	23	25	6,316	
Early neonatal death rate	1.9	2.1	2.5	none
Neonatal deaths	29	34	7,751	
Neonatal death rate	2.3	2.8	3.1	4.1
Postneonatal deaths	14	17	3,237	
Postneonatal death rate	1.1	1.4	1.3	2.0
All infant deaths	43	51	10,988	
Infant mortality rate	3.5	4.2	4.4	6.0

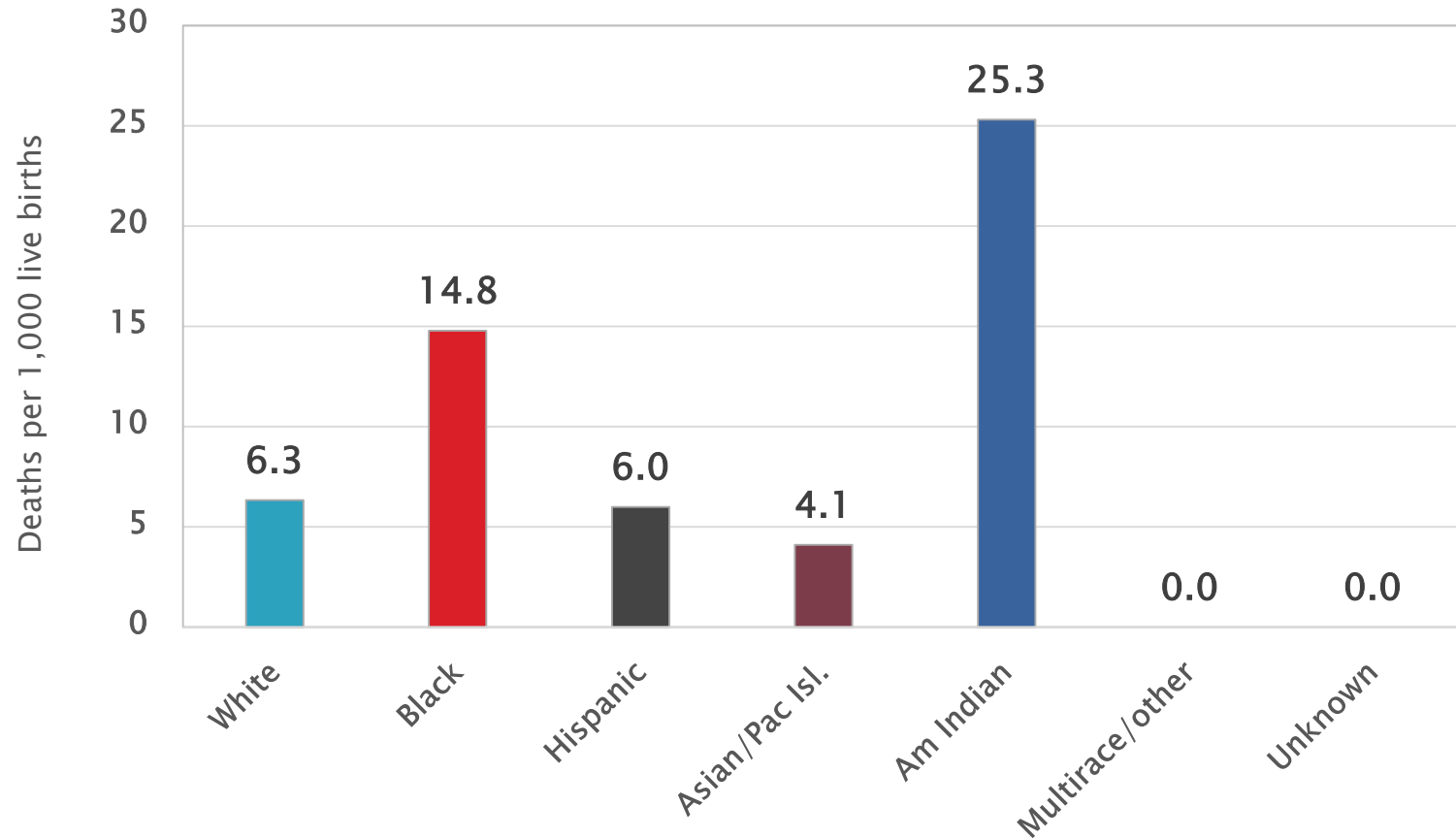
Early neonatal – <7 days of birth

Neonatal – <28 days of birth

Postneonatal – ≥28 days of birth to <1 yr

Source: Yolo County HHSA Community Health Branch, Death Records, VRBIS

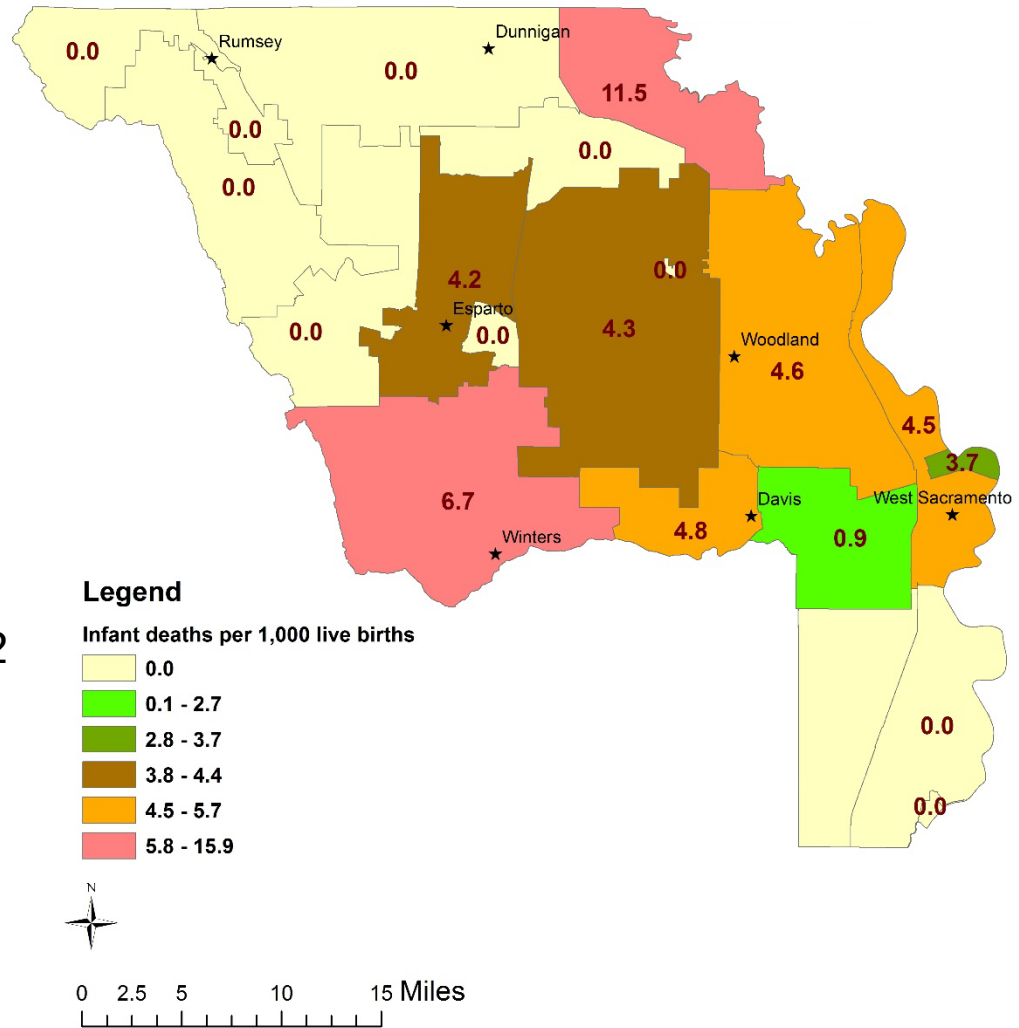
Infant Mortality by Race–Ethnicity, Yolo County, 2012–2016



Source: Yolo County HHS Community Health Branch, Vital Records

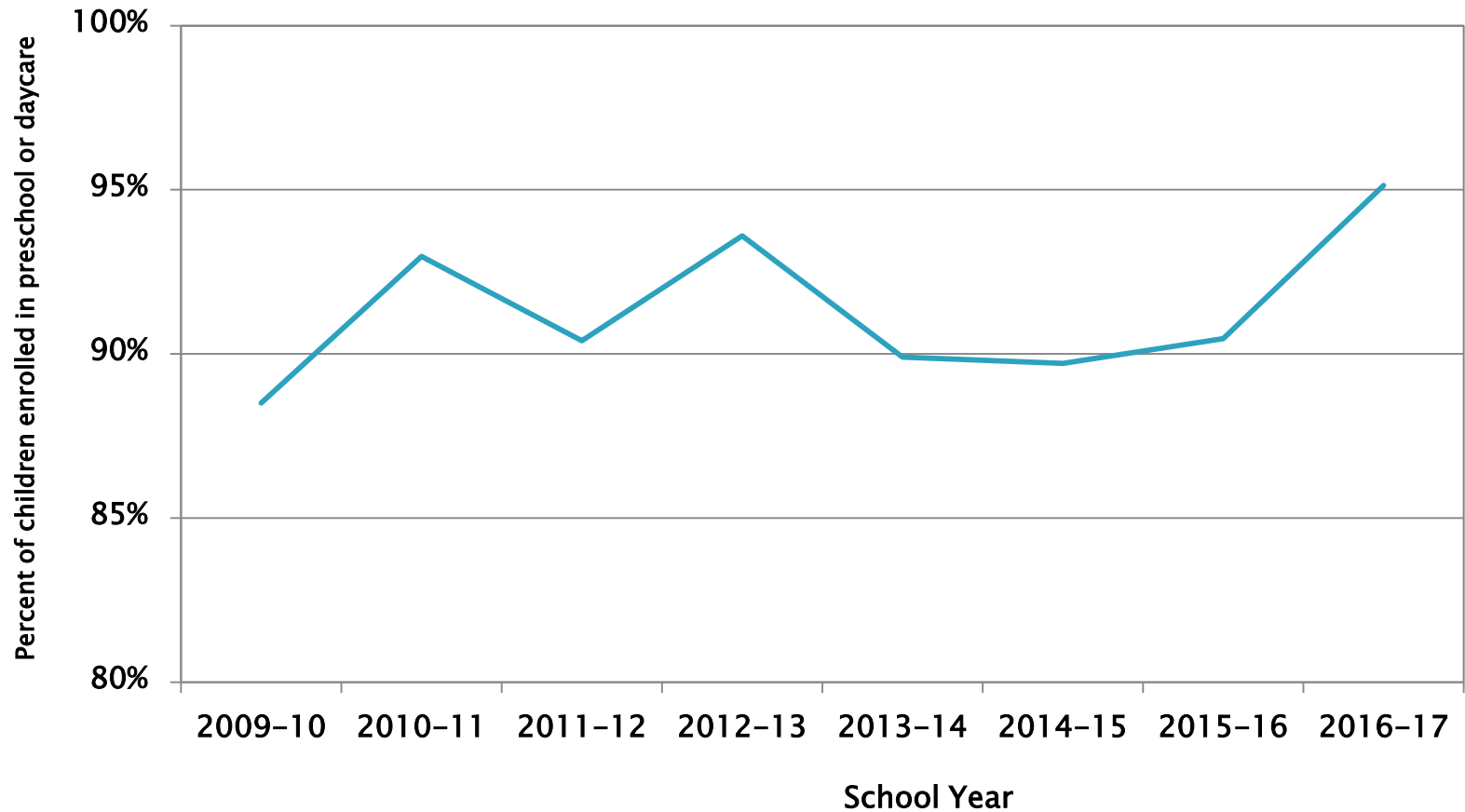
Infant Mortality (per 1,000 live births) by ZIP Code, 2012–2016

Mortality Rates:
 Yolo County (2012–16): 4.2
 California (2015) 4.3
 USA (2015): 5.9



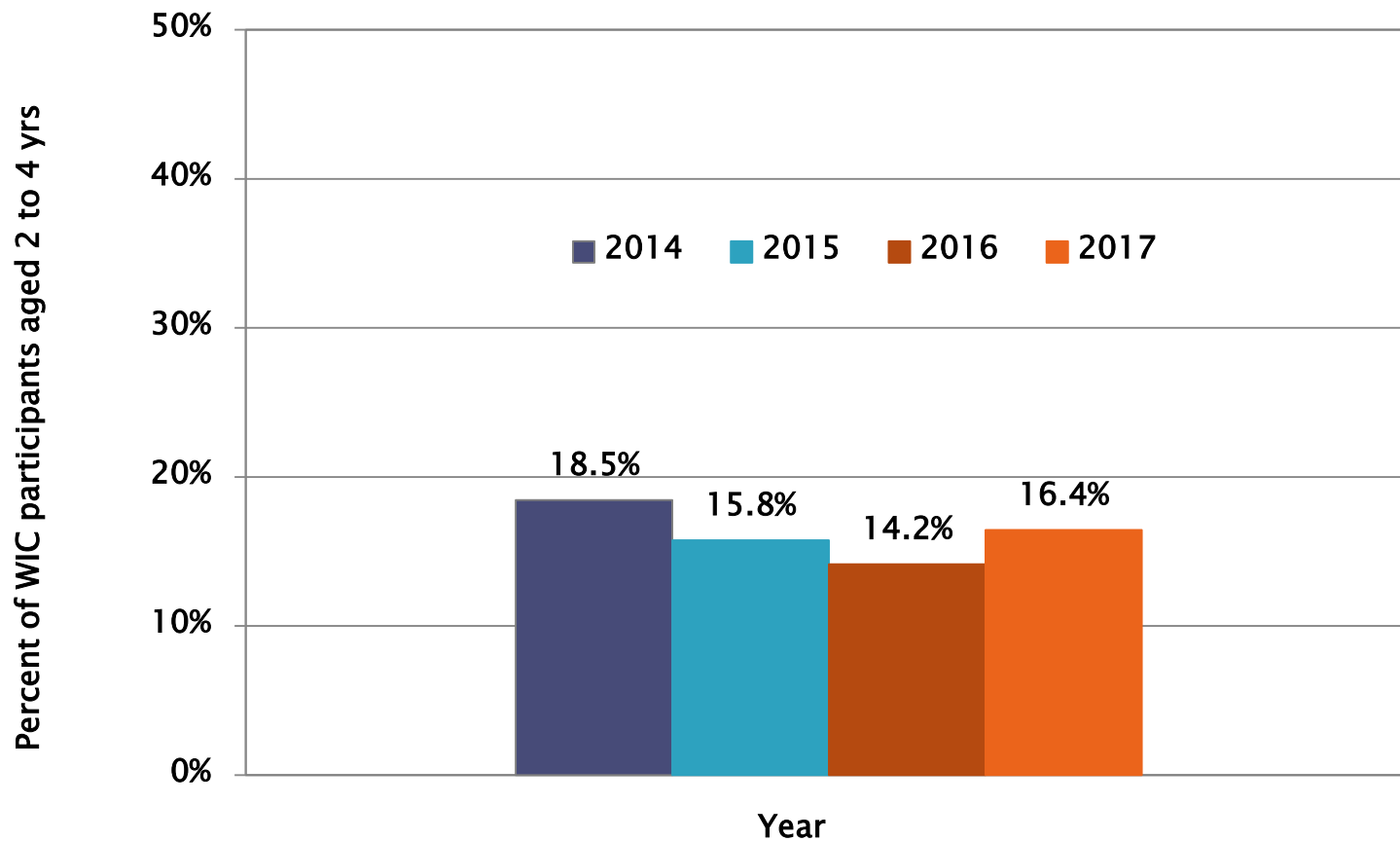
Source: Yolo County HHSA Community Health Branch, VRBIS

Percent of Children in Preschool/Childcare Up-to-Date on Vaccinations



Source: California Dept of Public Health, Immunization Assessment

Overweight among WIC Children aged 2 to 4 by City, Yolo County, 2017

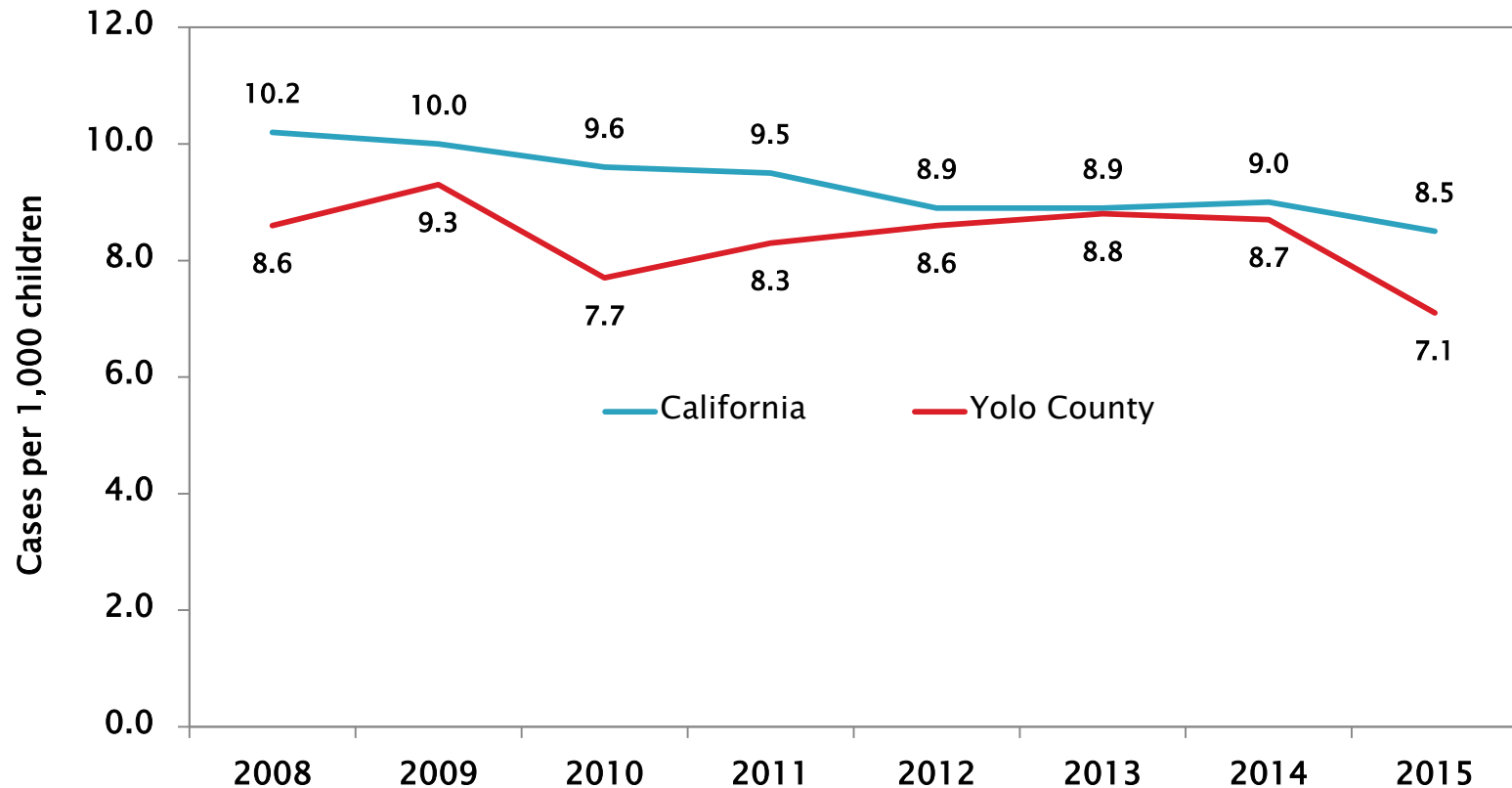


Source: Yolo County WIC Program, Raptor database

School–Age (5 to 14) Child Health Indicators

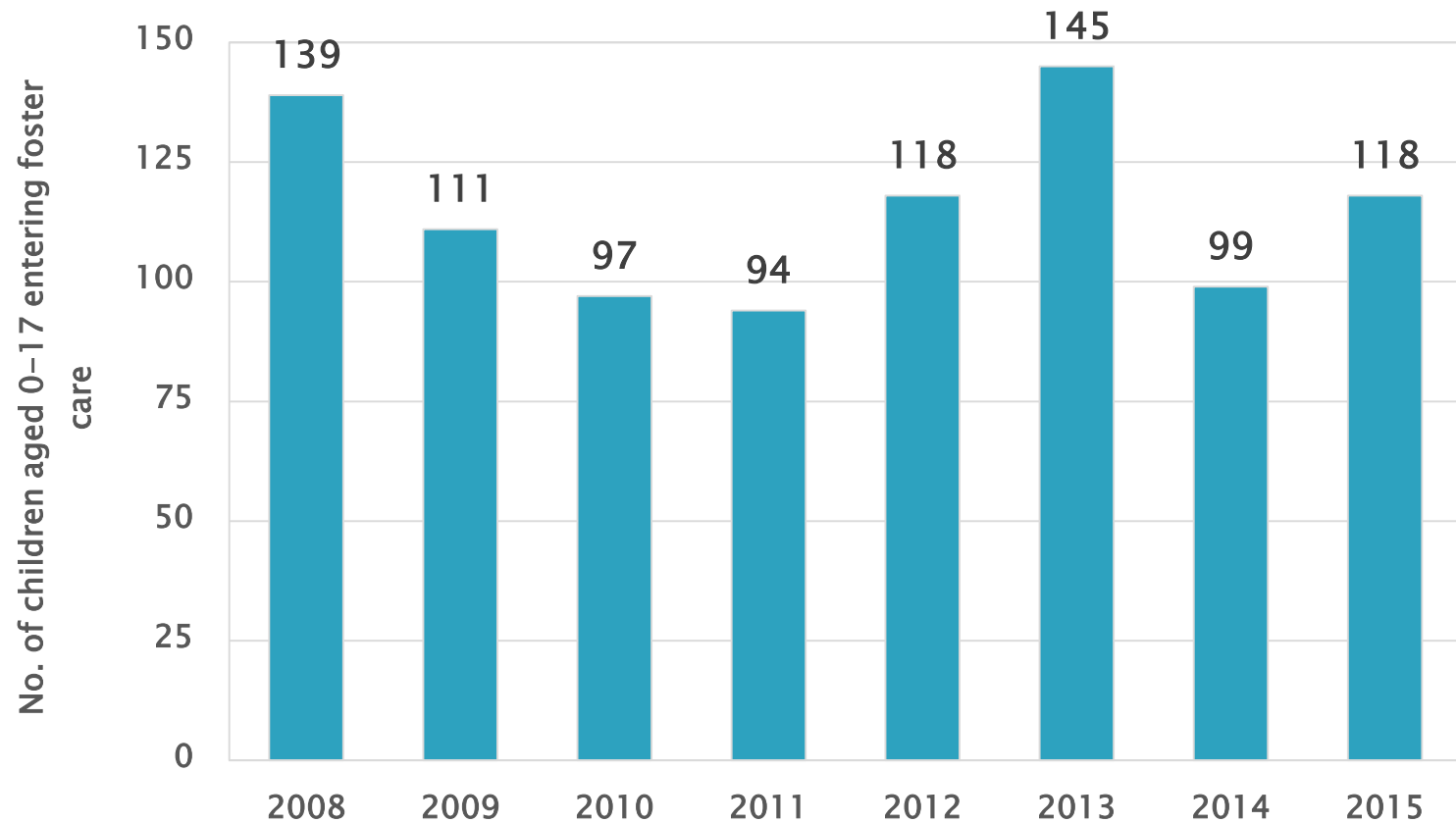
- » Child Abuse and Foster Care
- » Current on Vaccinations
- » School Achievement
- » Obesity/Overweight

Substantiated Cases of Child Abuse per 1,000 Children (0-17), Yolo County vs. CA, 2008-2015



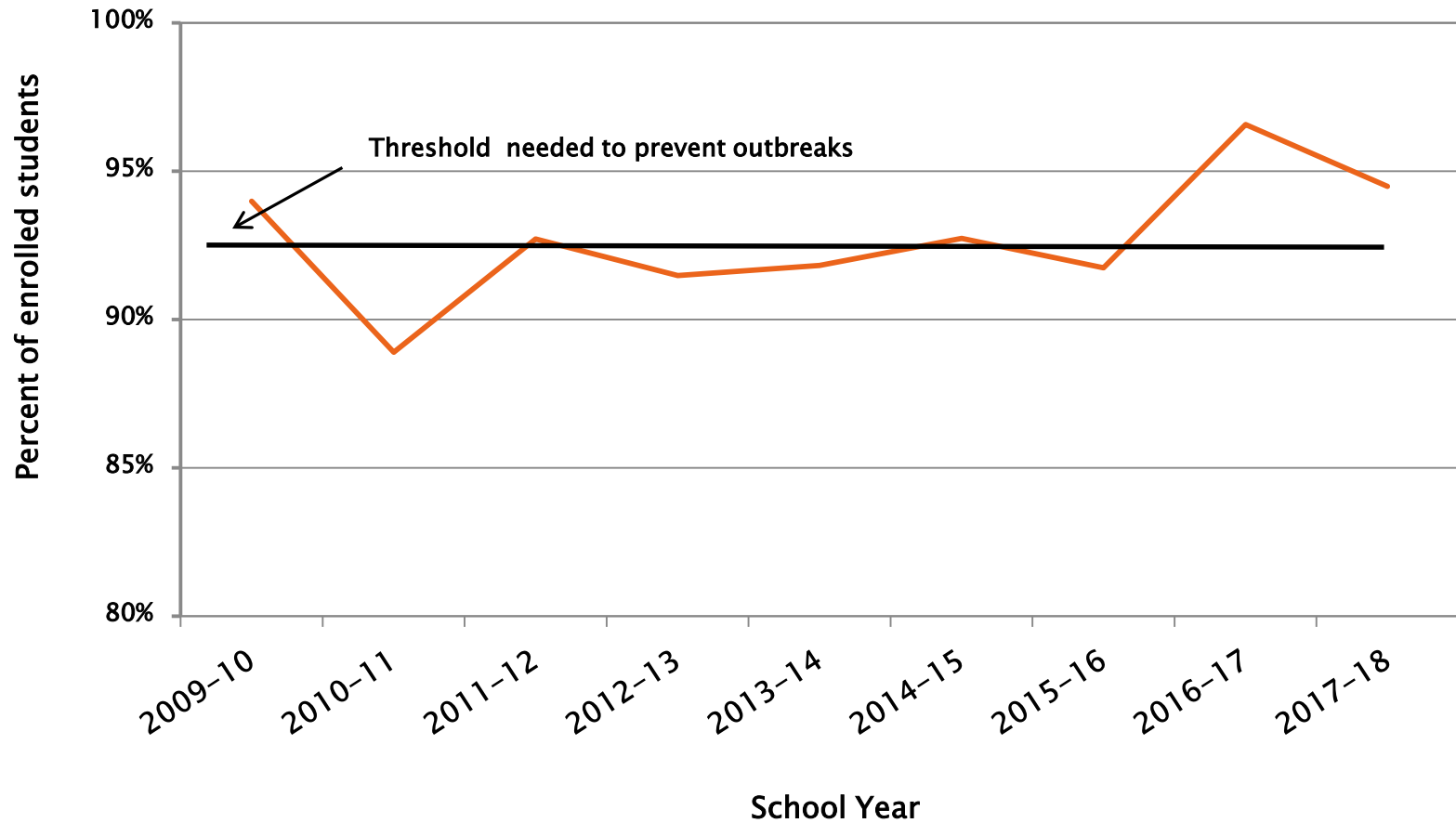
Source: <http://www.kidsdata.org/topic/9/>

Number of Yolo County Children Entering Foster Care, 2008–2015



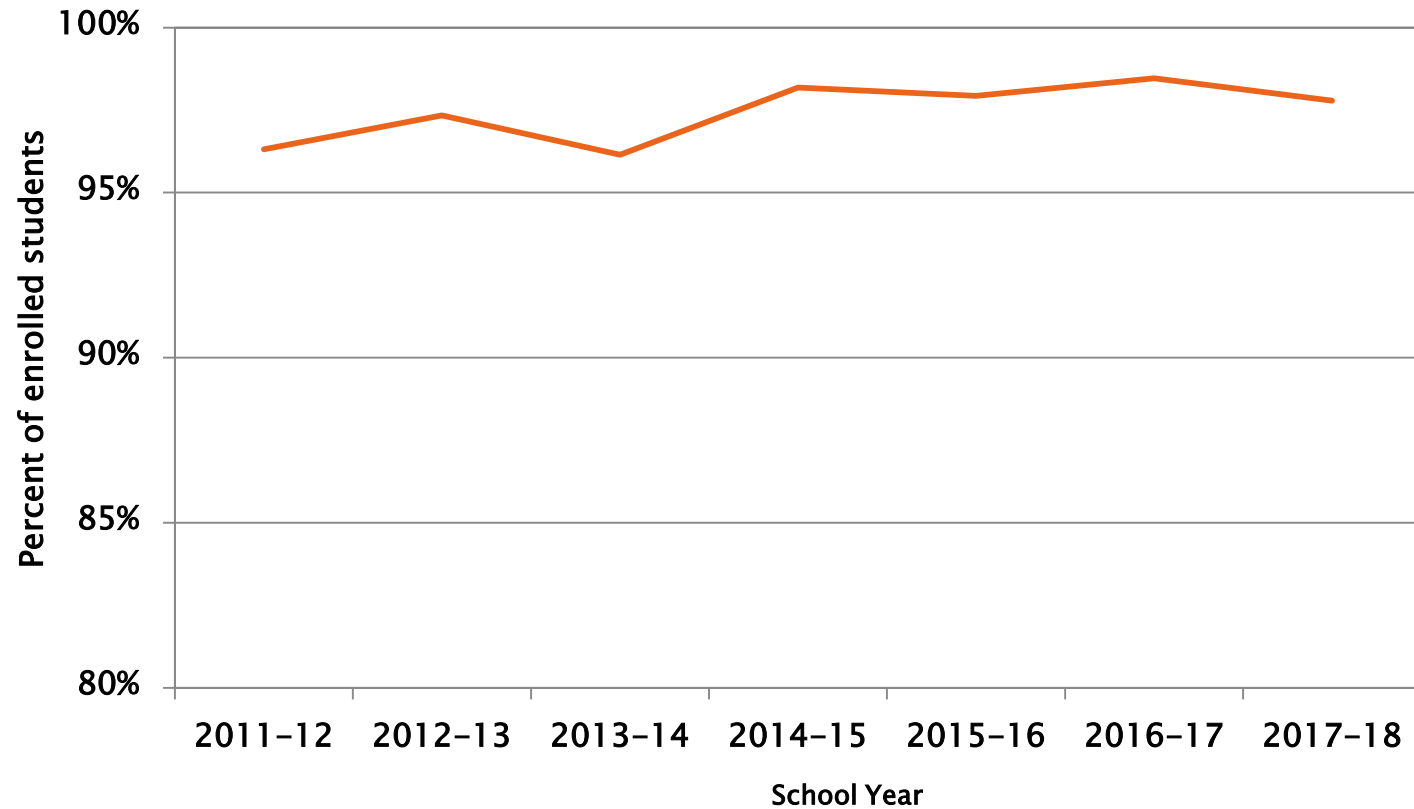
Source: <http://www.kidsdata.org/>

Percent of Yolo County Kindergarteners Up-to-Date on Vaccinations, 2009–2017



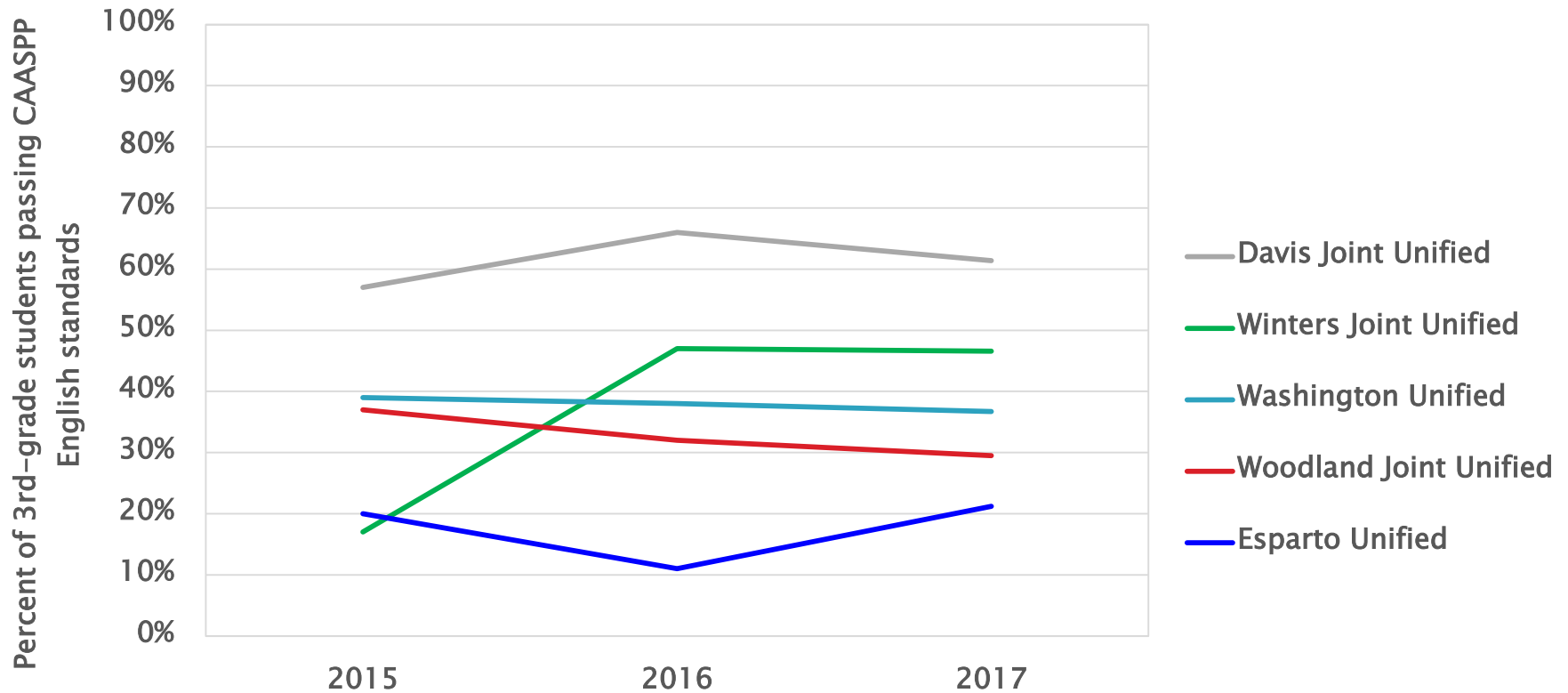
Source: California Dept of Public Health, Immunization Assessment

Tdap Immunization Rates, Yolo County 7th Graders, 2011–2017



Source: California Dept of Public Health, Immunization Assessment

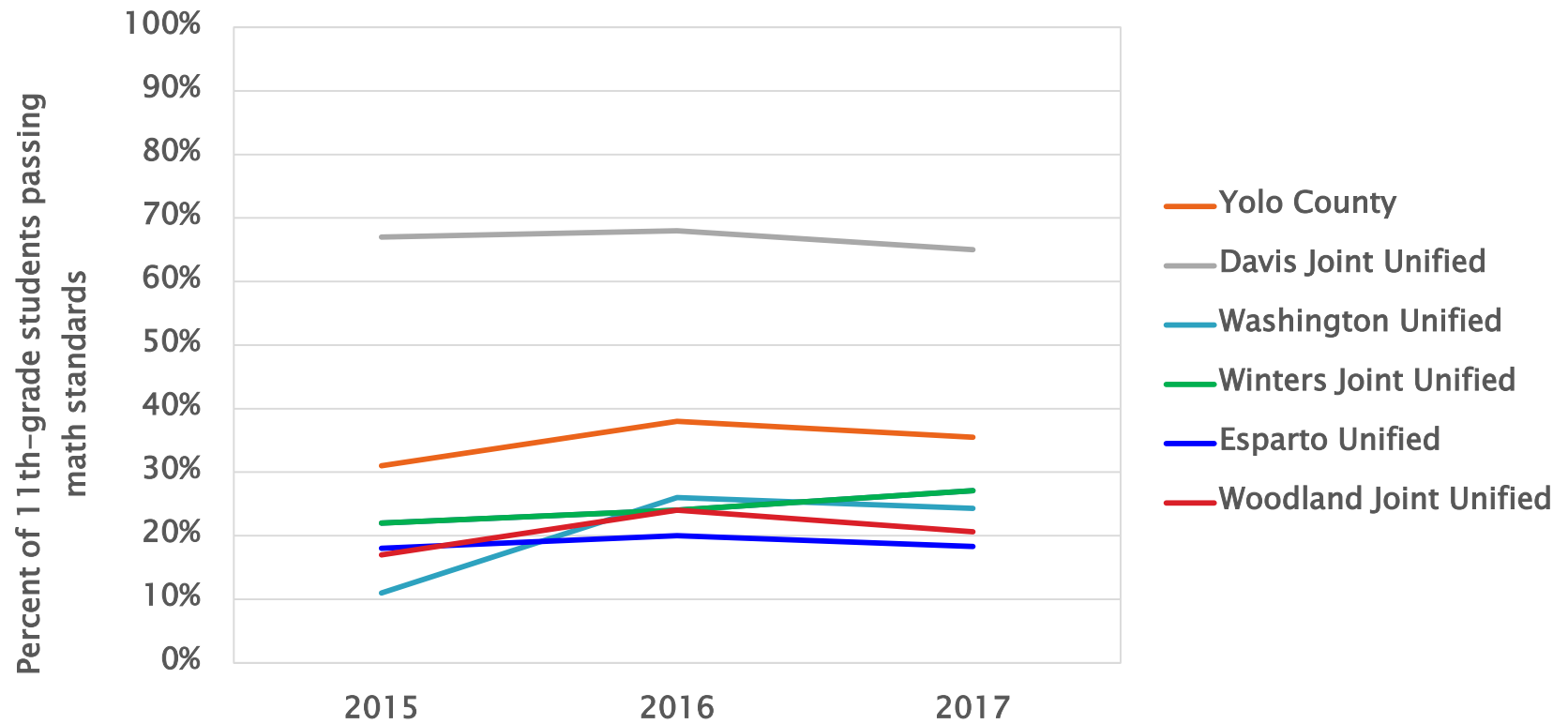
3rd Grade CAASPP* English Language Proficiency, Yolo County 2015–2017



*California Assessment of Student Performance and Progress

Source: California Department of Education

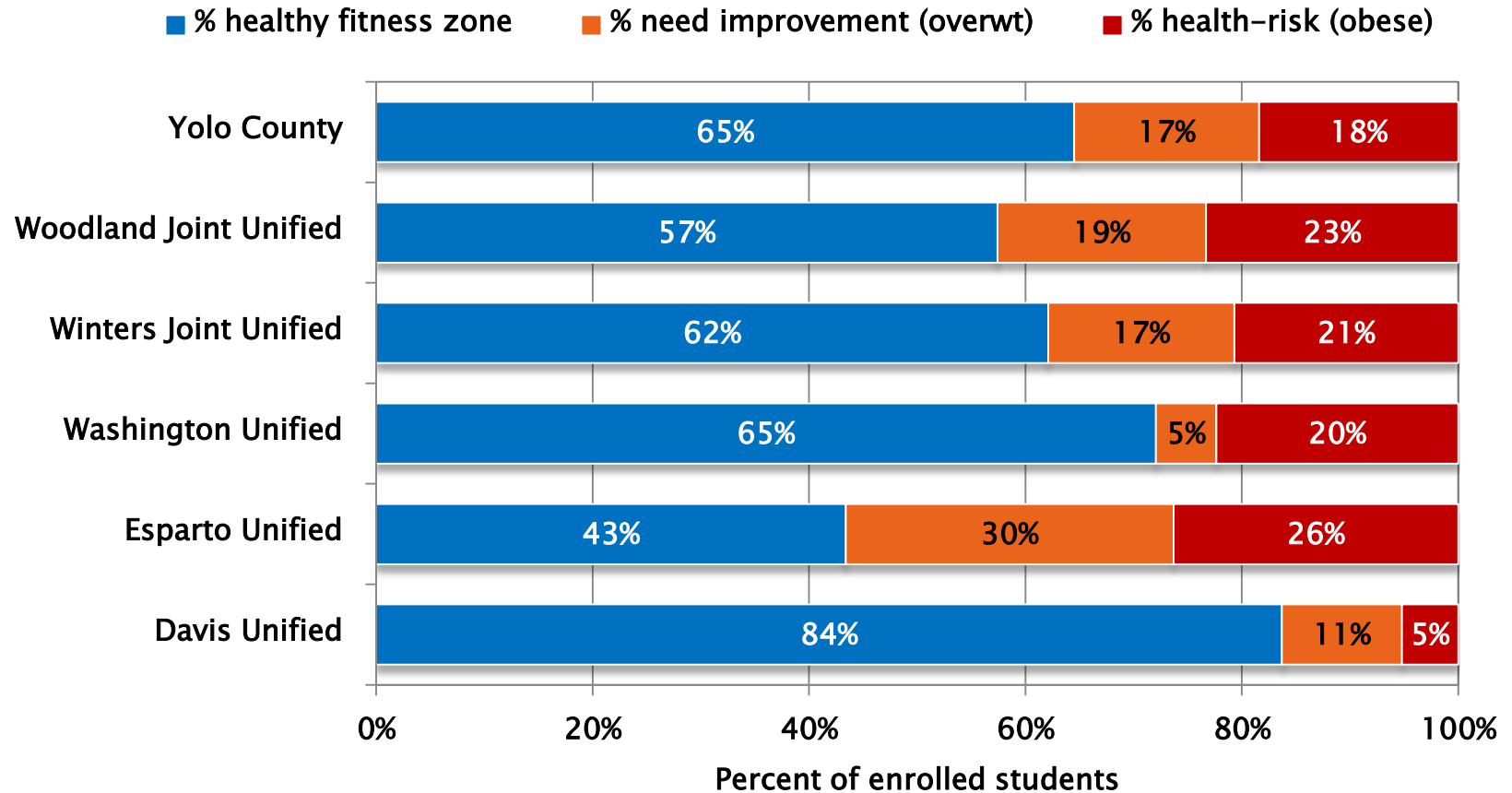
11th Grade Math, Met or Exceeded CAASPP* Standards, Yolo County 2015-2017



*California Assessment of Student Performance & Progress

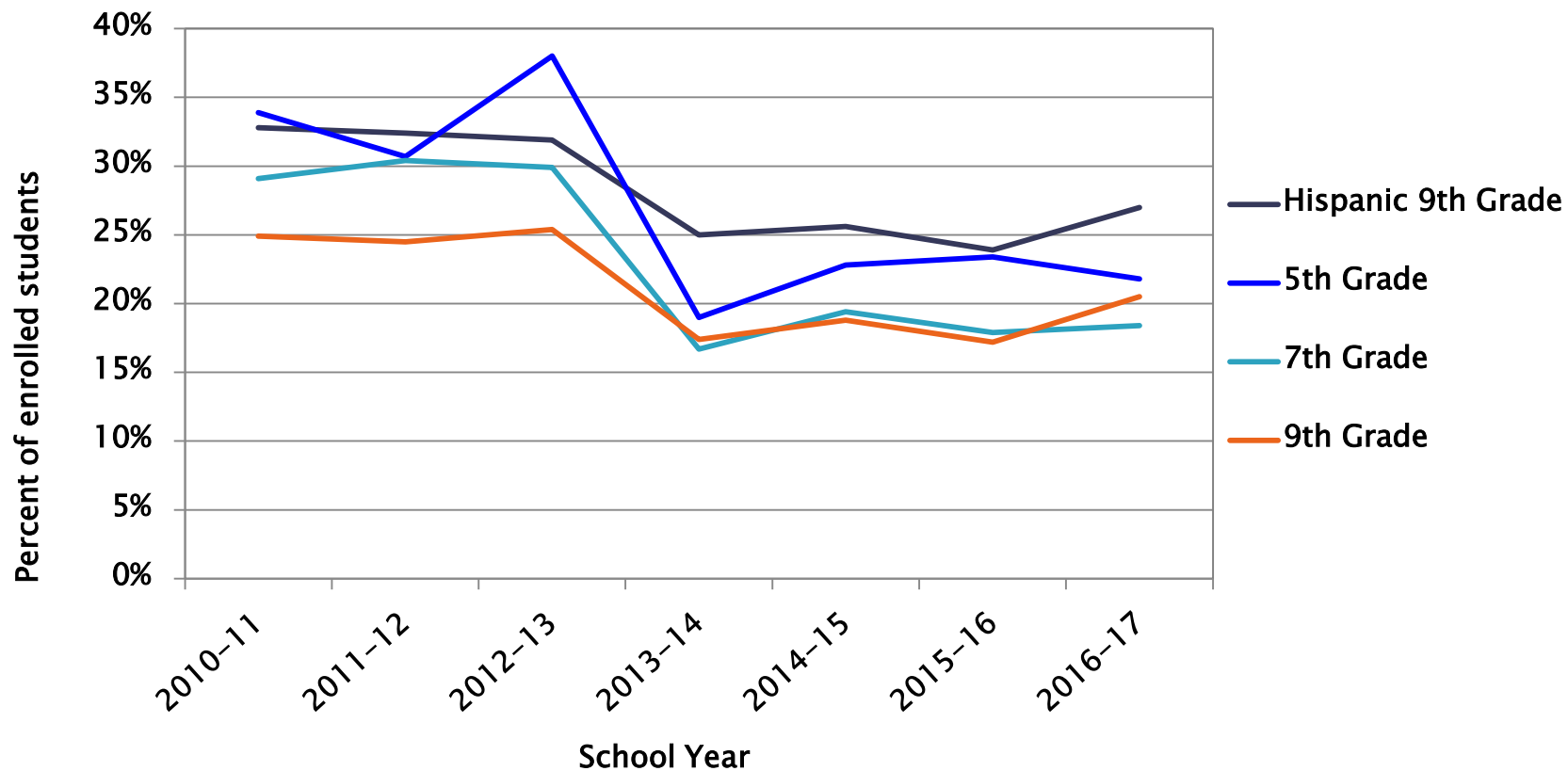
Source: California Department of Education

Body Composition of 7th Graders by School District, Yolo County, 2016–17



Source: California Dept of Education, School Physical Fitness Testing

5th, 7th and 9th Grade at “Health-Risk” from Obesity, Yolo County Children, 2010–2016

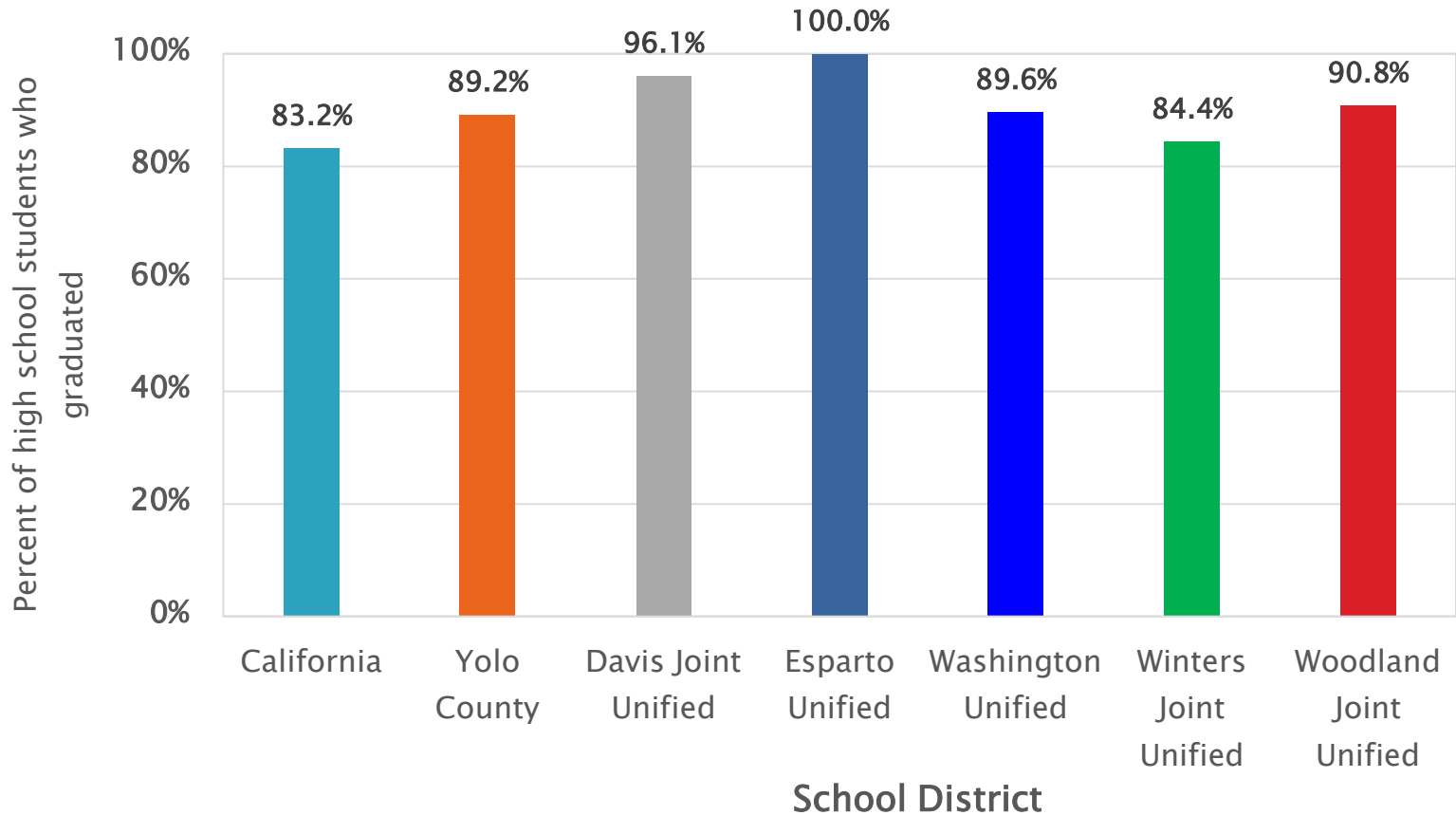


Source: California Department of Education

Teen/Young Adult Indicators

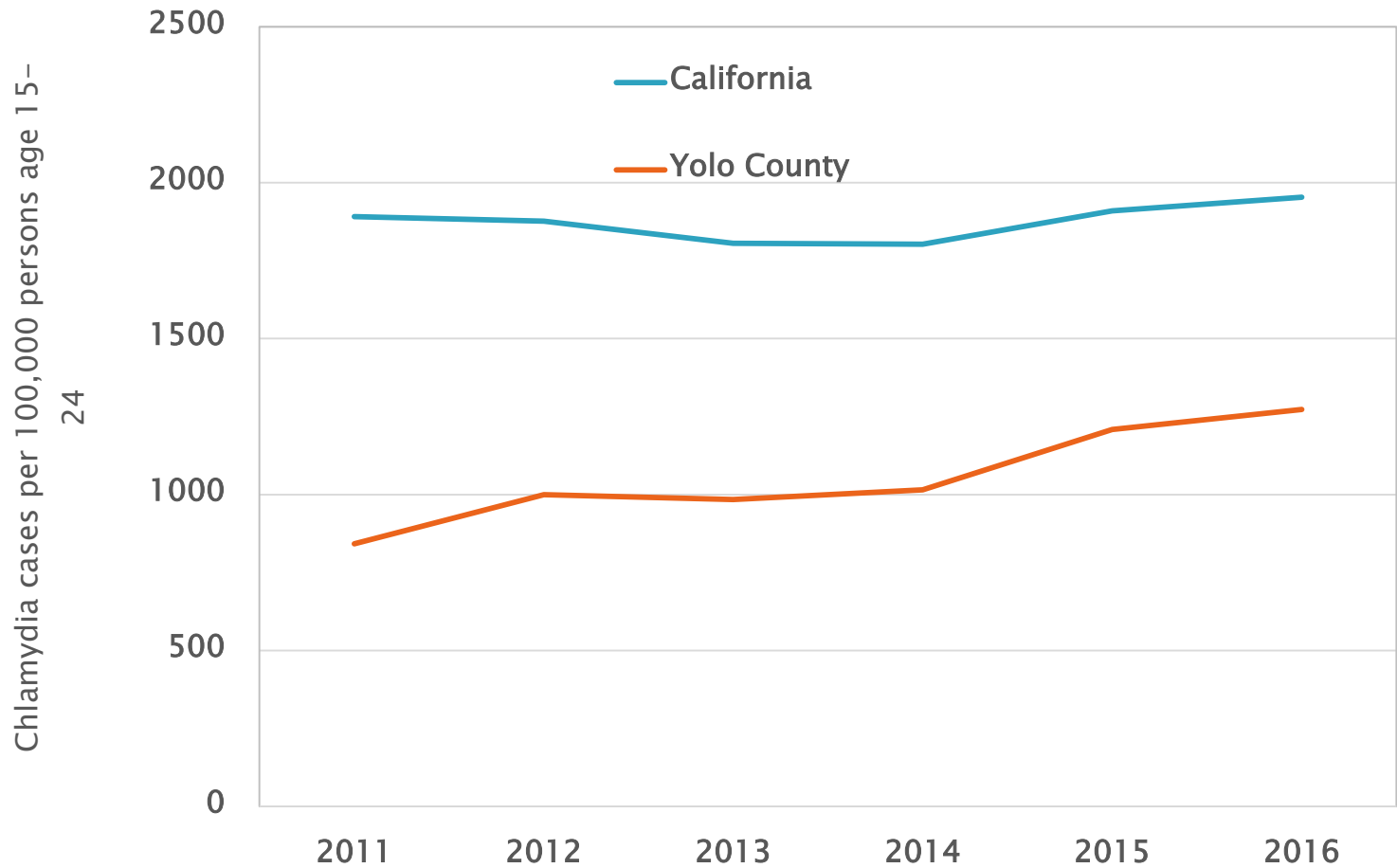
- » High School Graduation
- Sexually Transmitted Disease (STD) Rates
- Teen Pregnancy
- Youth (Age 15–24) Mortality

High School Graduation Rates by School District, Yolo County 2015-16



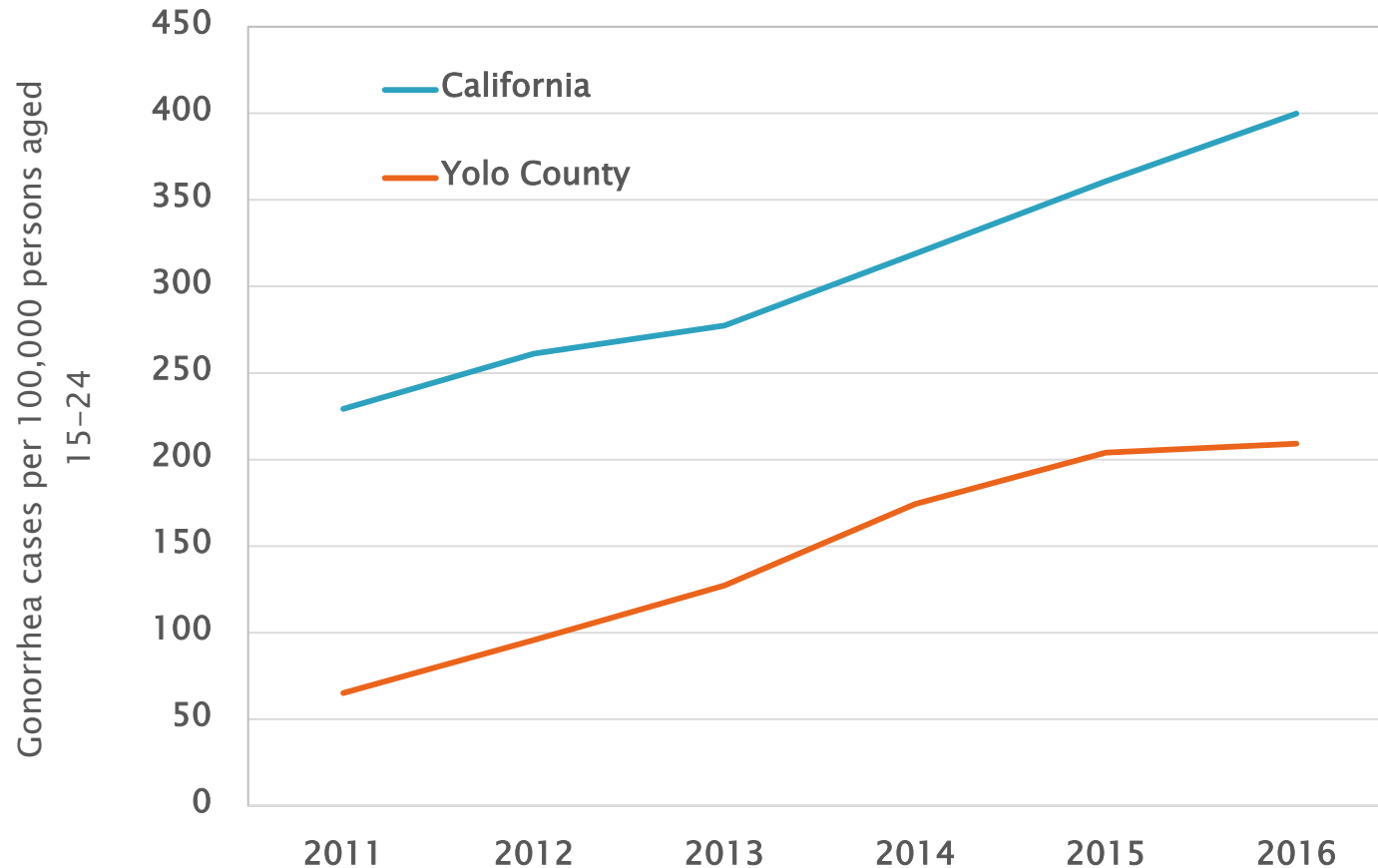
Source: California Department of Education

Age 15 to 24 Chlamydia Rates



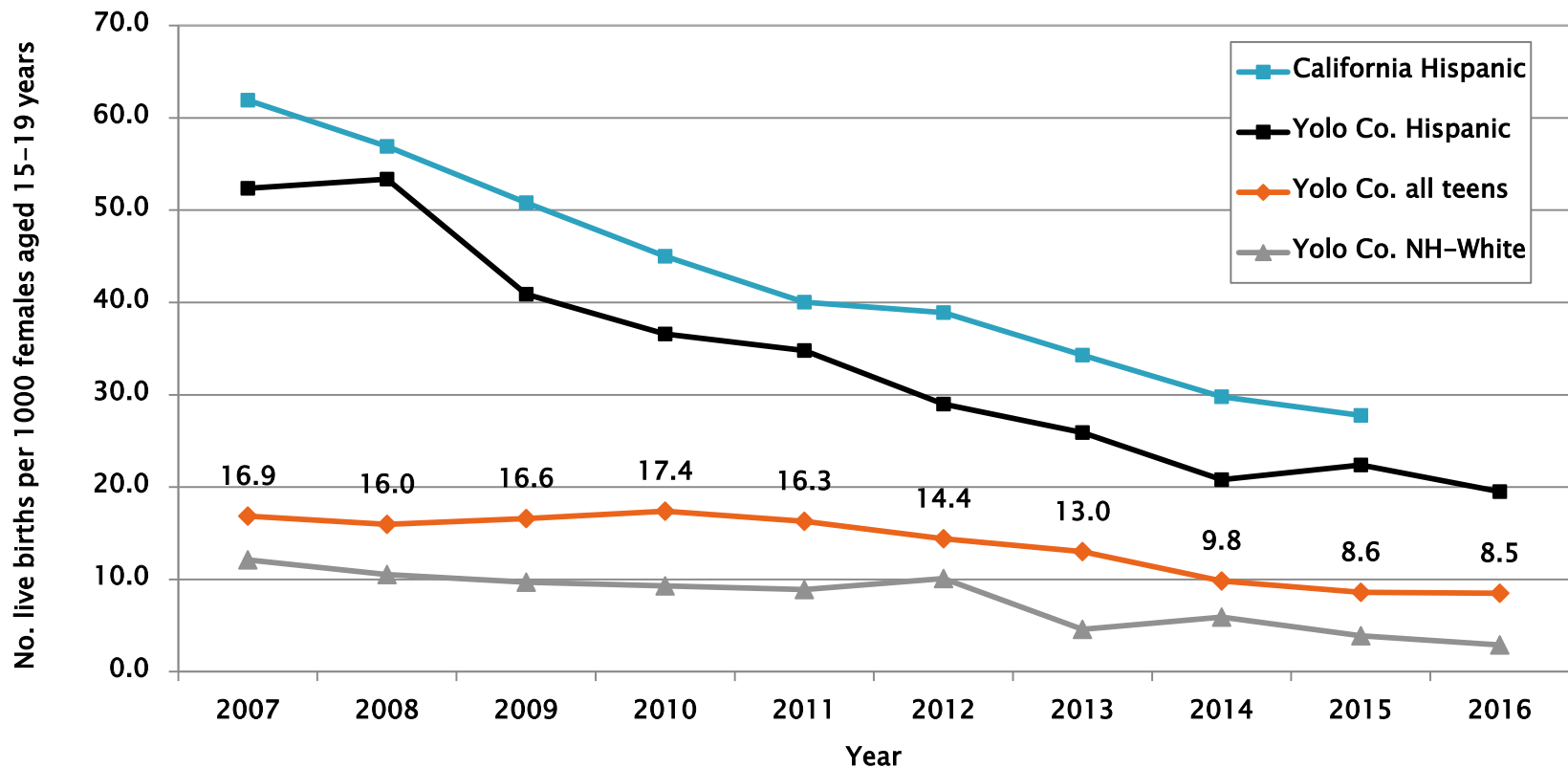
Source: Yolo County Communicable Disease, CalREDIE database

Age 15 to 24 Gonorrhea Rates, Yolo County vs. California 2011–2016



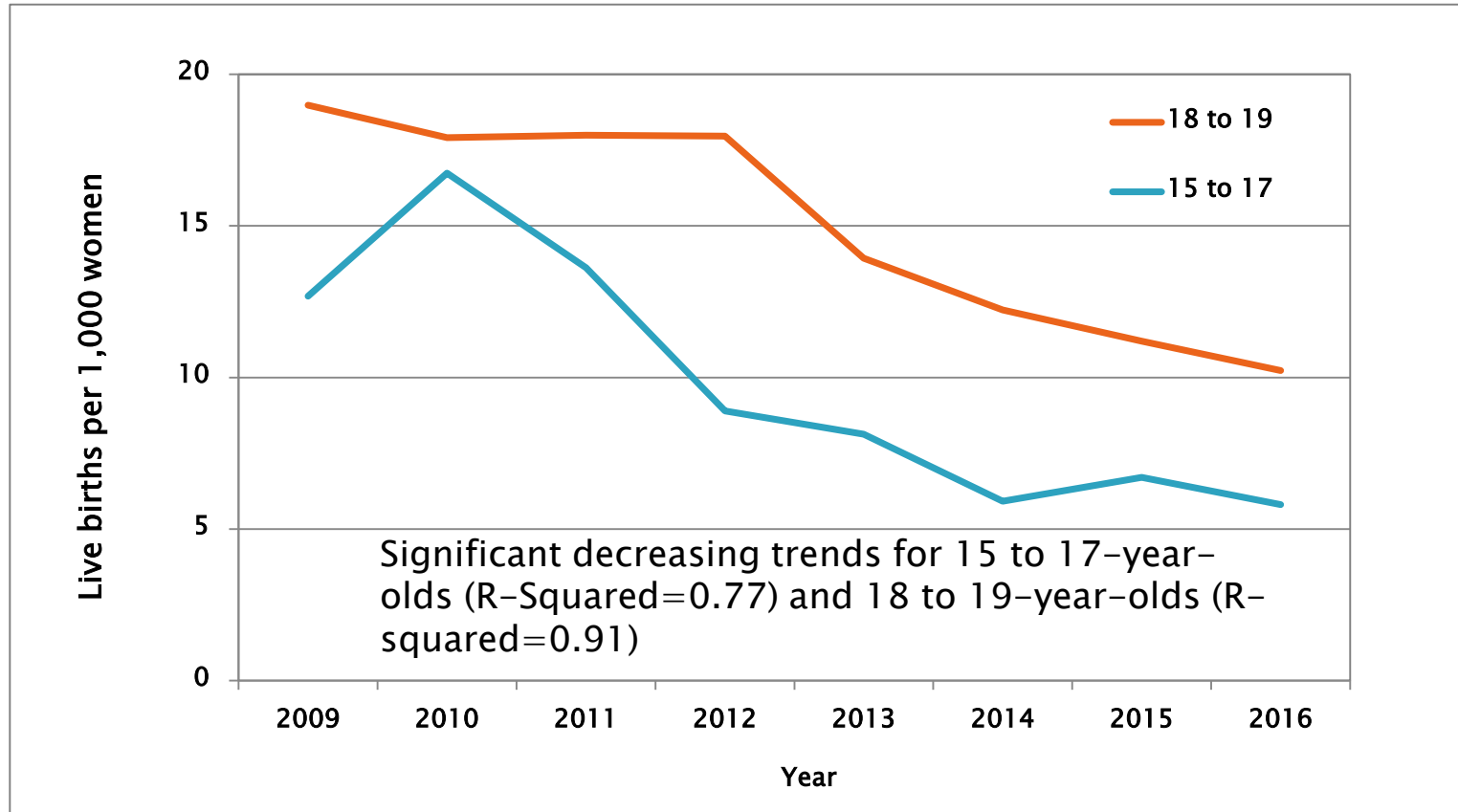
Source: Yolo County Communicable Disease, CalREDIE database

Teen (Age 15–19) Birth Rates by Race–Ethnicity, Yolo County vs. California, 2007–2016



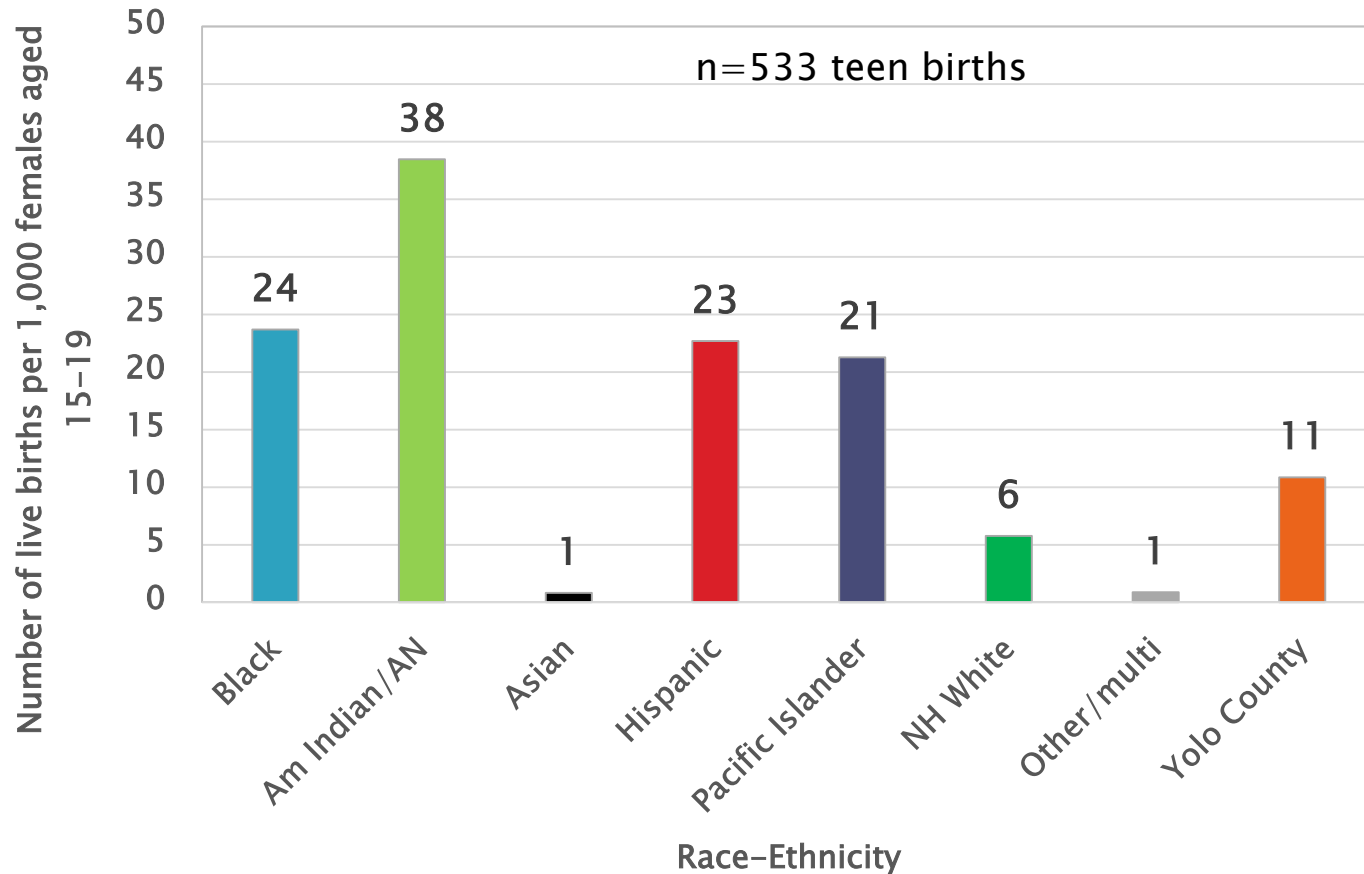
Source: Yolo County HHS Community Health Branch, Live Births

Teen (Age 15–19) Birth Rates by Age Group, Yolo County, 2009–16



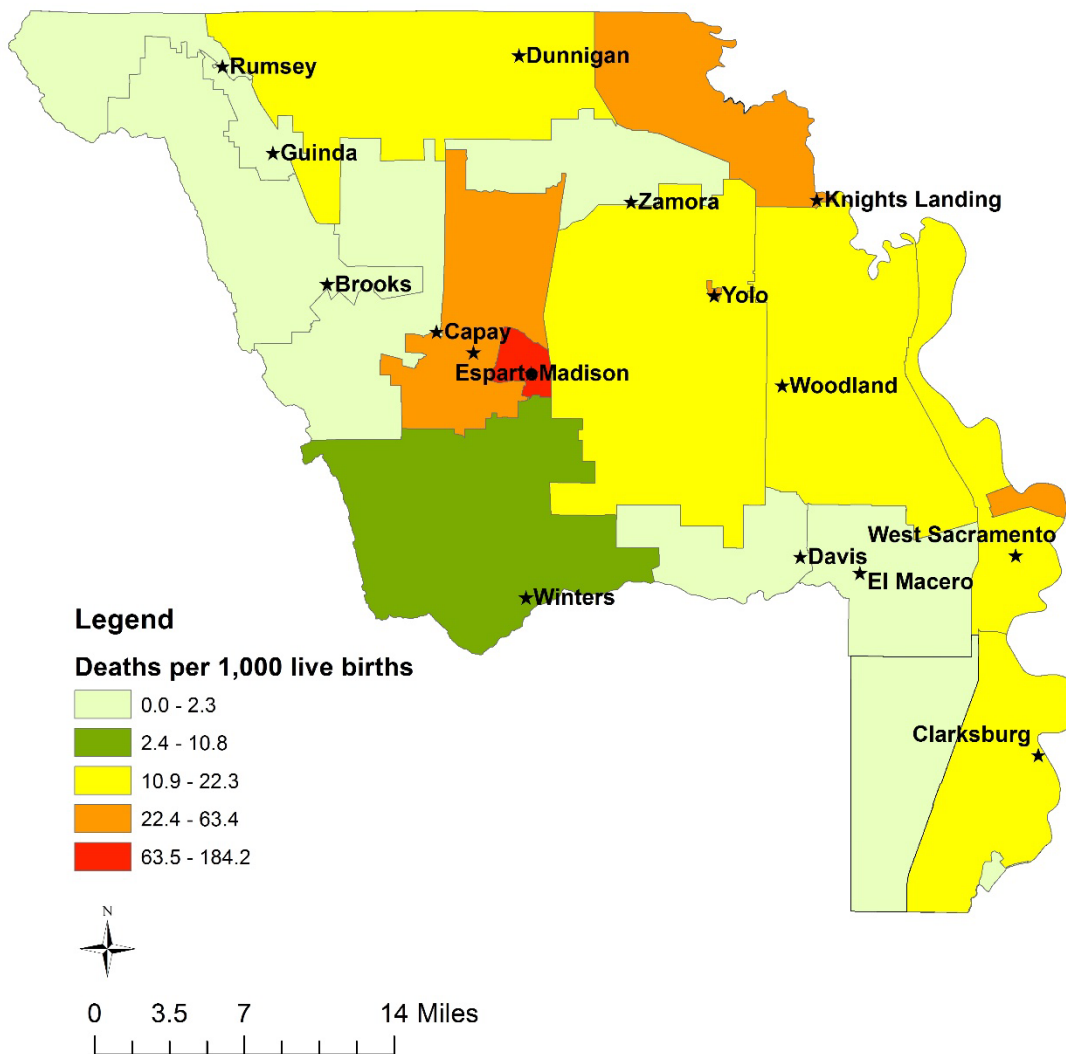
Source: Yolo County HHS Community Health Branch, Live Births

Teen (Age 15–19) Birth Rates by Race–Ethnicity, Yolo County, 2012–2016



Source: Yolo County HHS Community Health Branch, Live Births

Teen (Age 15 to 19) Birth Rates by ZIP Code, Yolo County, 2012-2016

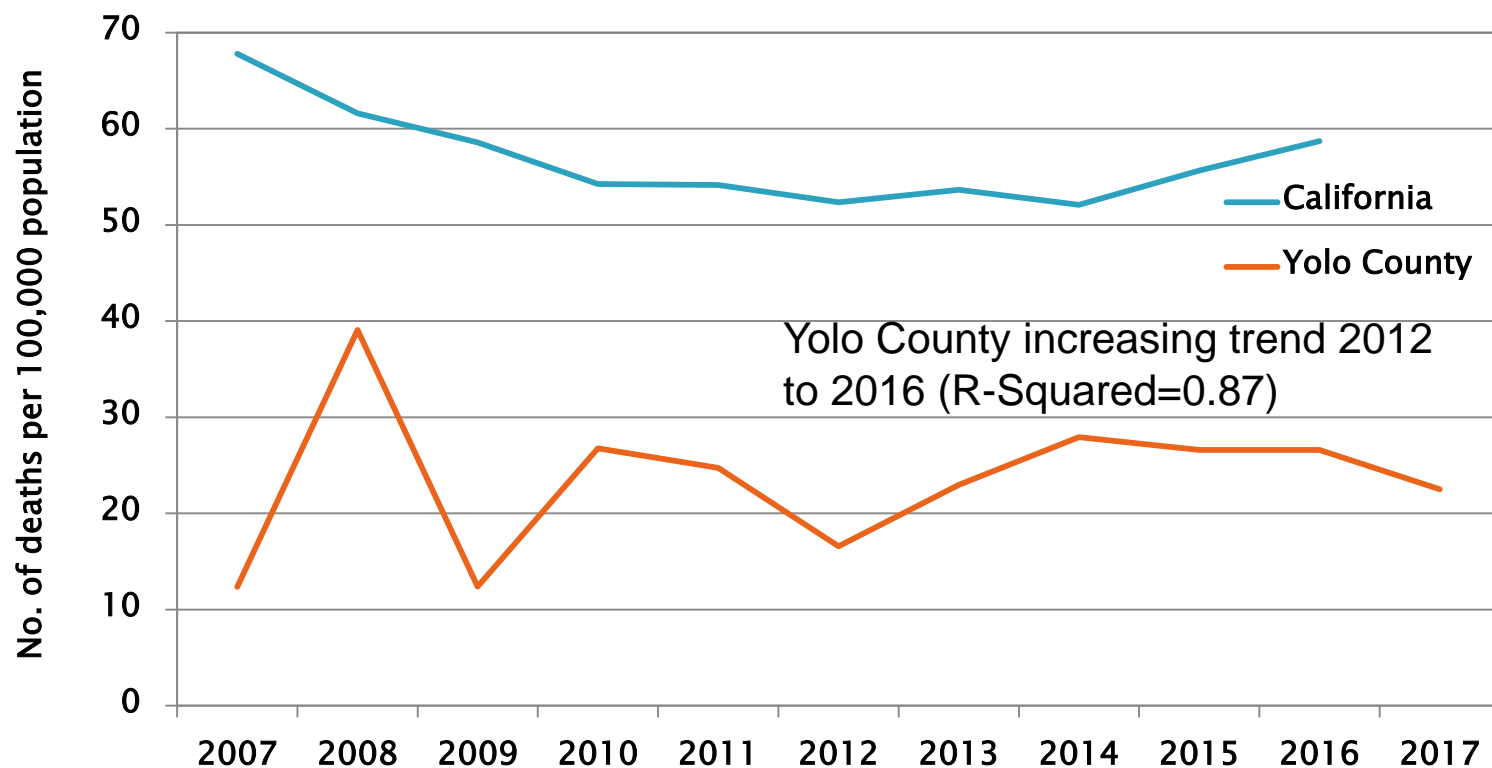


Source: Yolo County HHS Community Health Branch, Live Births

Teen Birth Disparities

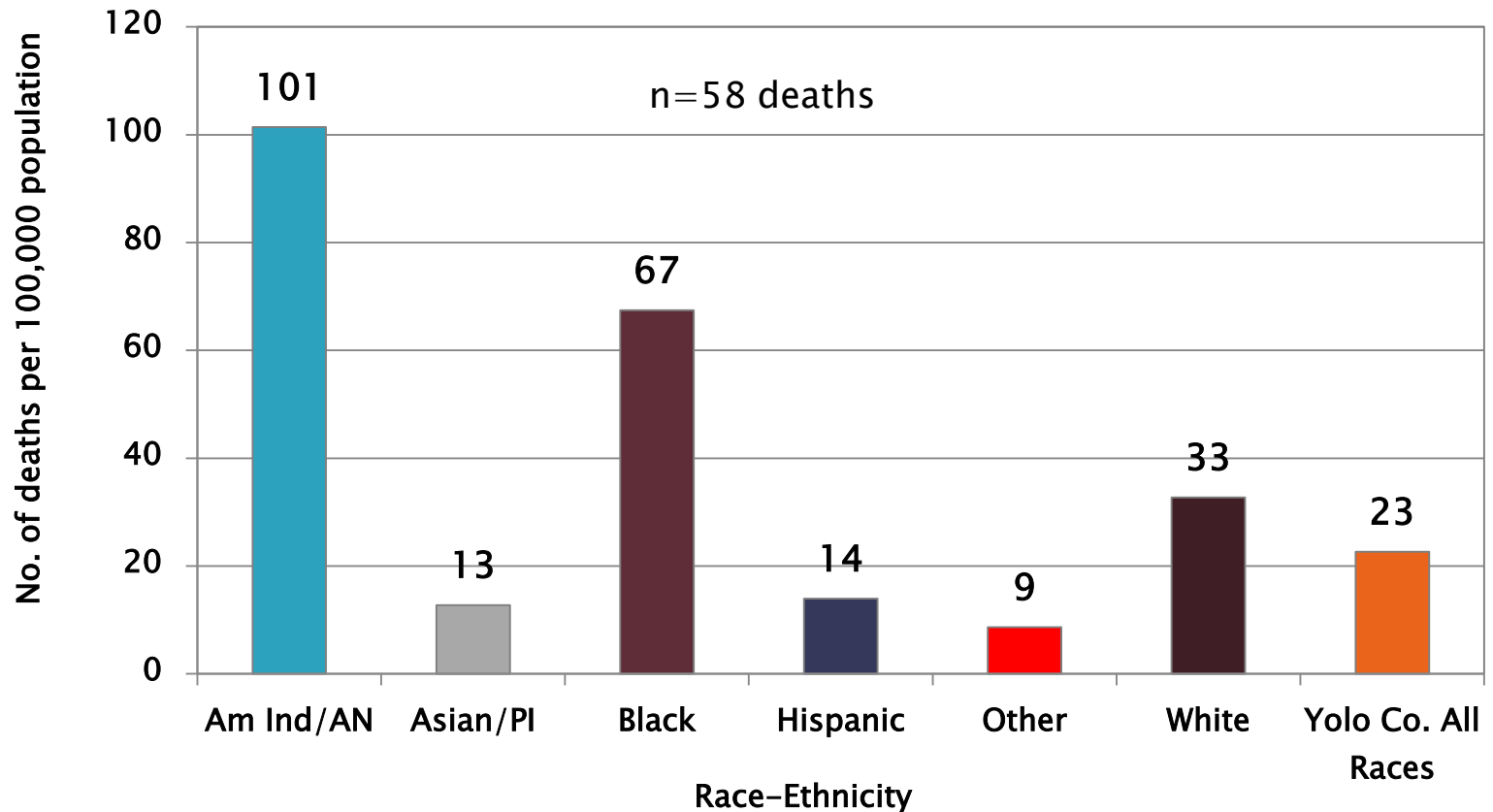
- ▶ In 2016: 83 births to teens aged 15–19 yr
 - 61 / 83 (73%) were to Hispanic teens
 - 35 / 83 (42%) were to Woodland residents
 - 31 / 83 (37%) were to West Sacramento residents
- ▶ Disparity:
 - Hispanic teens have higher rates than non-Hispanic
 - Woodland and West Sacramento have higher rates compared to other Yolo County cities and California
 - Geographic: some rural regions or ZIP codes

Youth (Age 15–24), Mortality Rates Yolo County vs. California, 2007–2017



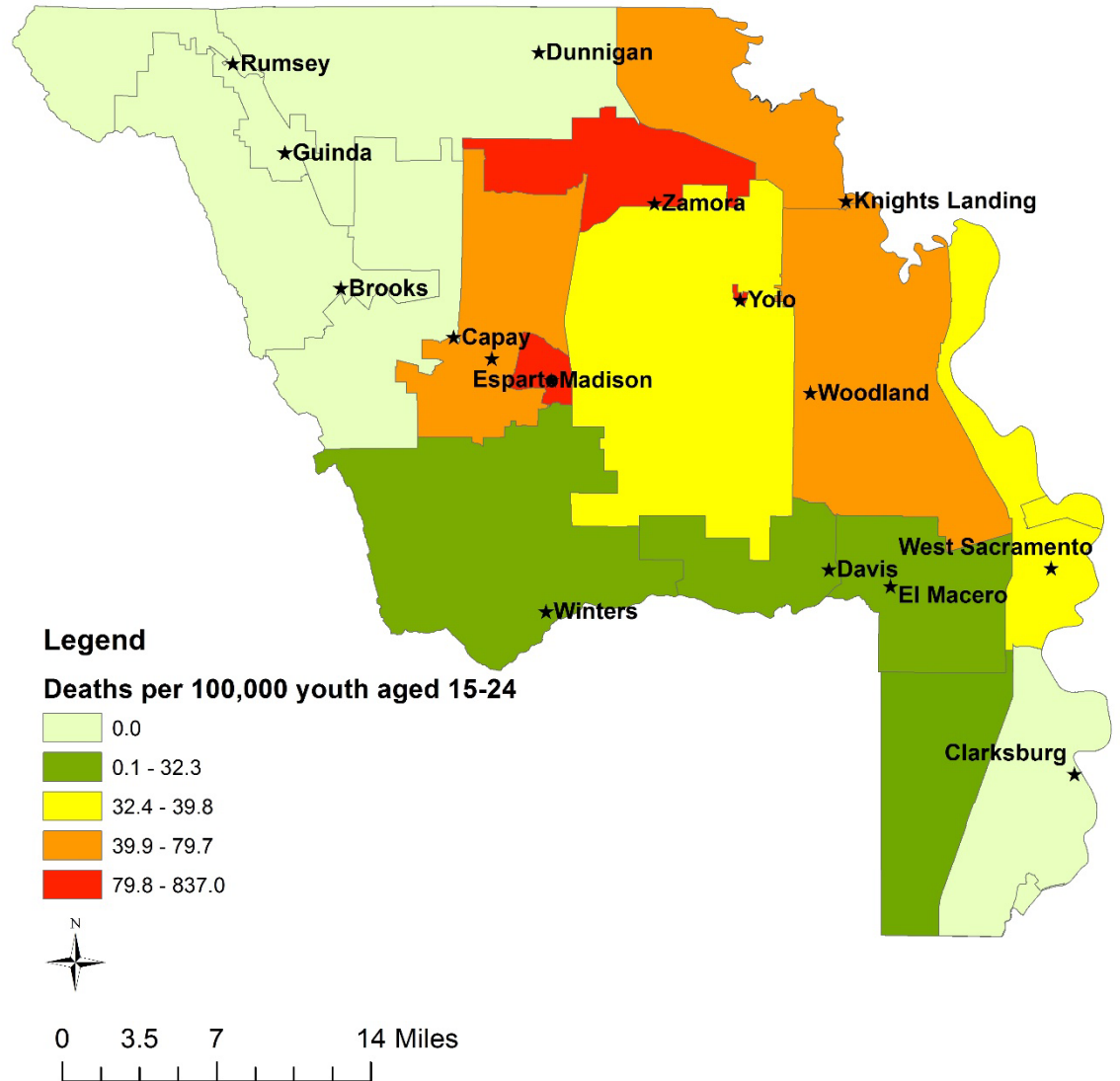
Source: Yolo County Death Records, VRBIS and CDC Wonder (California data)

Youth (Age 15 to 24) Mortality Rates by Race–Ethnicity, Yolo County, 2012–2016



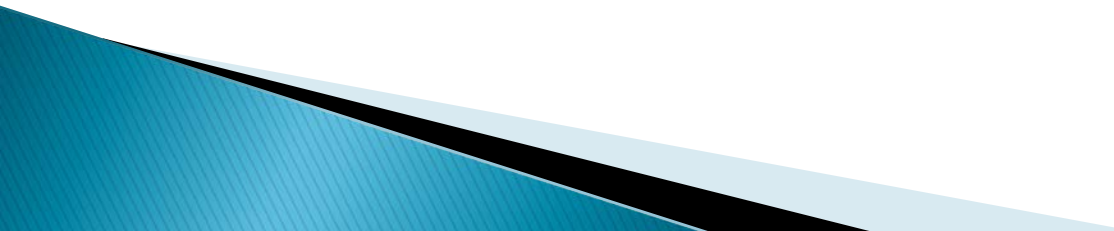
Source: Yolo County MCAH Program, Death Records

Youth (Age 15-24) Mortality Rates by ZIP Code, 2012-2016

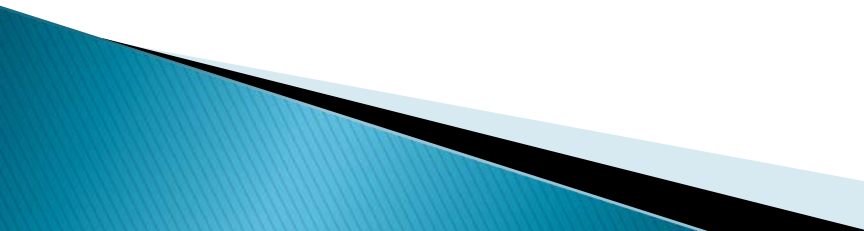


Source: Yolo County MCAH Program, Death Records

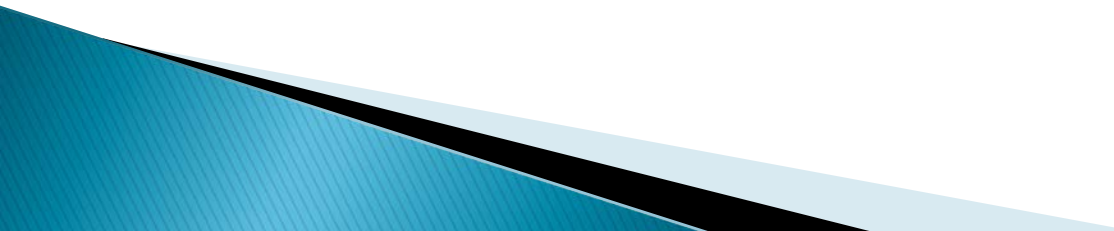
Conclusions – Accomplishments

- ▶ High in-hospital breastfeeding rates
 - ▶ Met HP2020 goal for 6-mo exclusive breastfeeding, even among WIC mothers
 - ▶ 1st-trimester entry into prenatal care (PNC) higher than State and rising slowly
 - ▶ Preterm births as percent of all births met March of Dimes goal (<8%)
 - ▶ Low infant, child and young adult mortality vs. State and USA
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Conclusions – Areas for Improvement

- ▶ Maternal mental (MH) health – hospitalizations for MH and substance abuse on the rise
 - ▶ Disparities remain – disproportionately poorer outcomes for Hispanic and black youth and mothers
 - ▶ Scholastic achievement (3rd grade reading, 11th grade math) – many school districts performing poorly
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Conclusions – Areas for Improvement (cont'd)

- ▶ High proportions of mothers, children and youth are overweight or obese
 - ▶ High percentage of pregnant mothers with GDM (9–10%)
 - ▶ Increasing STD rates in young adults
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Questions?

