



Item 6

Maternal Health and Maternal Health Workforce Landscape

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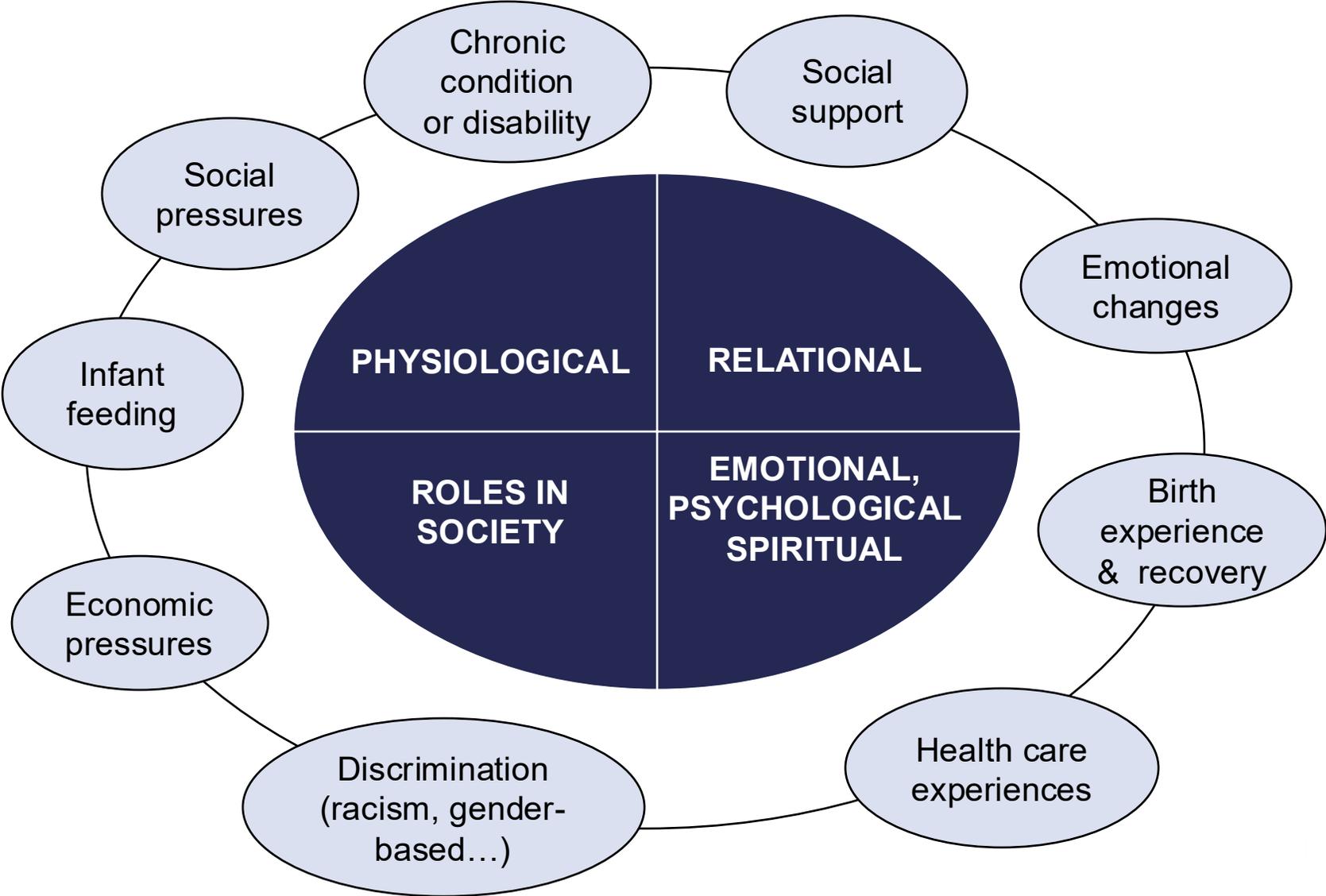
California Maternal Health Workforce Landscape

Ariana Thompson-Lastad, PhD
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Roadmap

1. Framing: Pregnancy, birth and postpartum in California
2. Access to Perinatal Care
3. Maternal Health Workforce: Scope and Composition
4. Workforce Challenges and Stressors
5. Policy Opportunities & Levers for Change

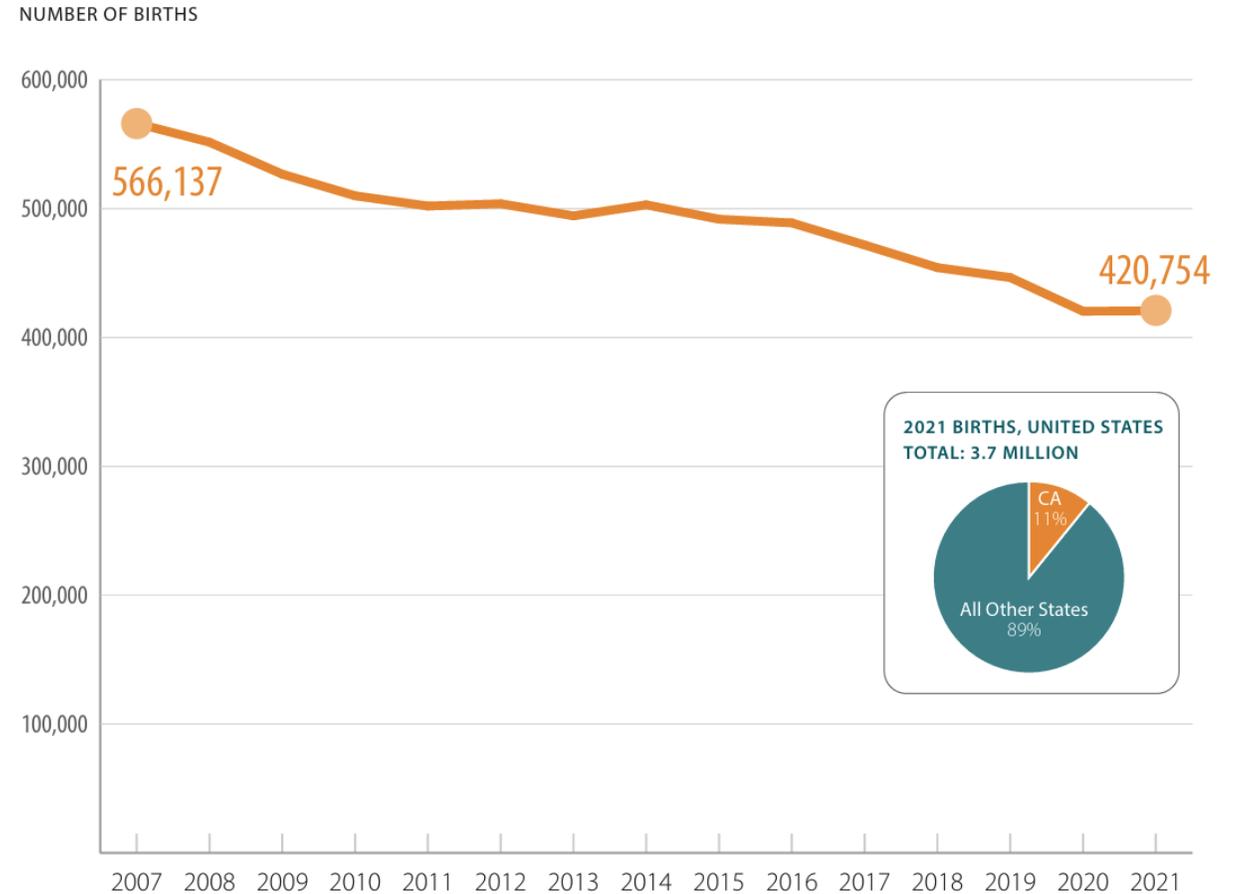
Perinatal health: a whole-person, biopsychosocial transition



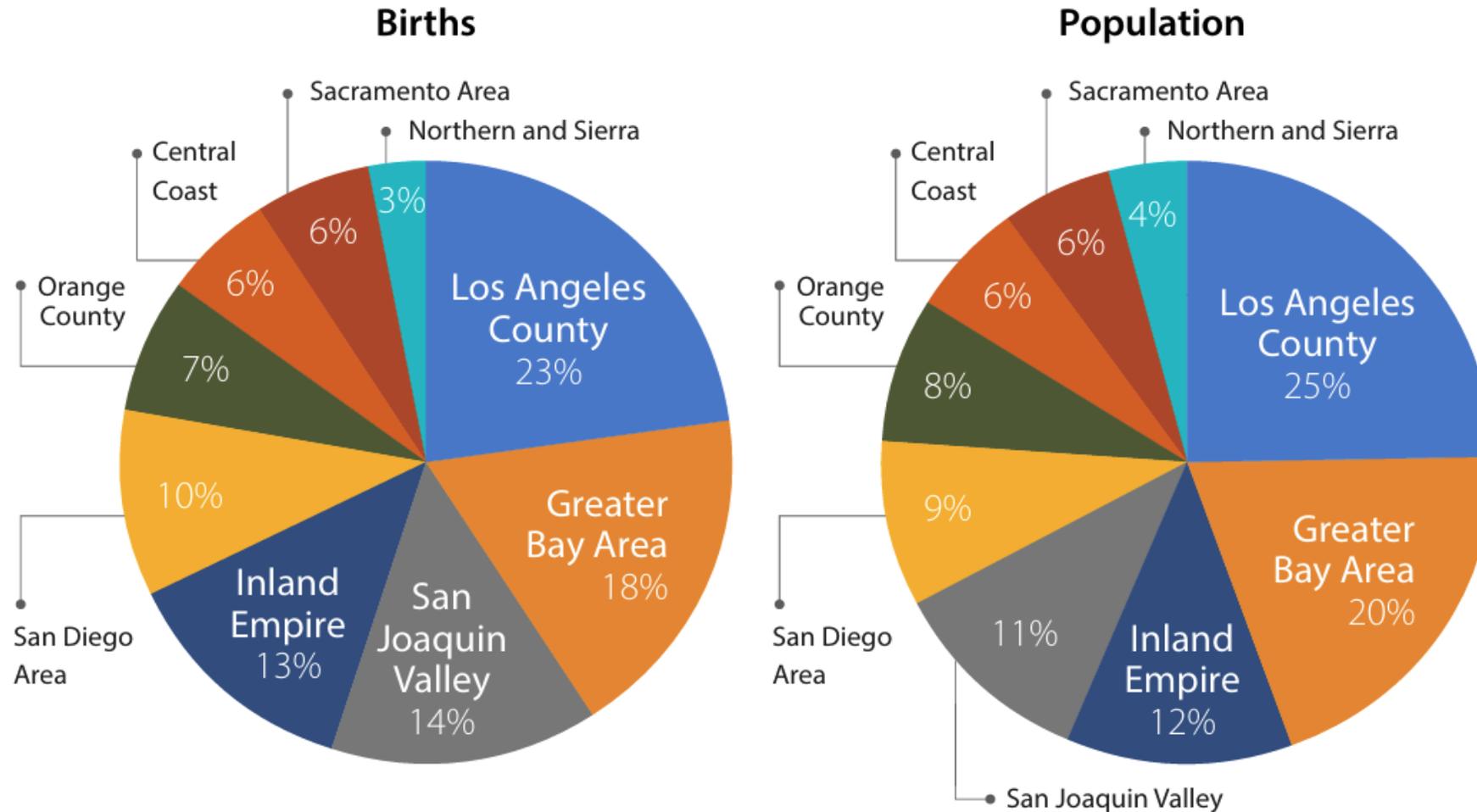
Pregnancy, Birth & Postpartum in California

Birth in California

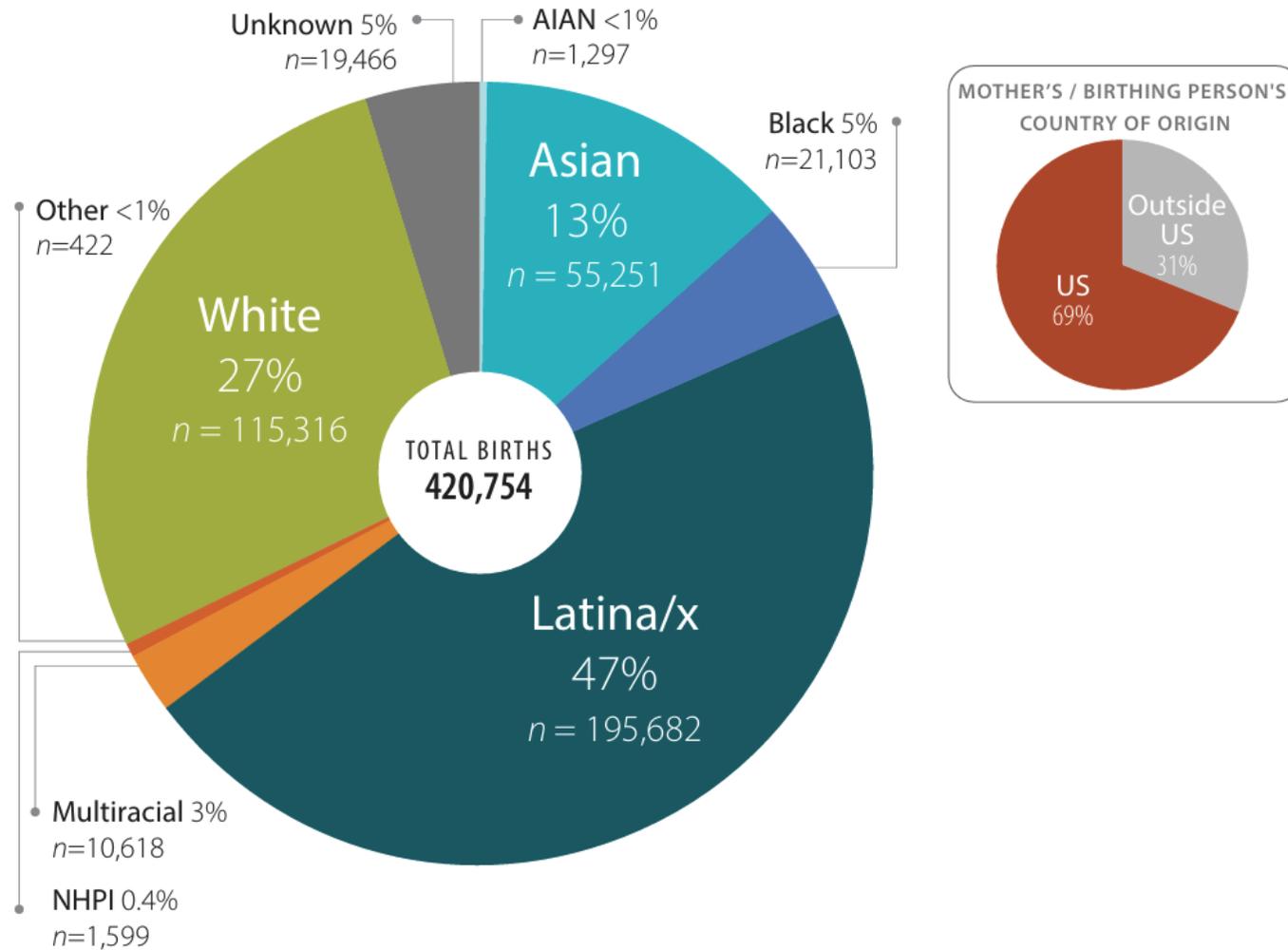
- In 2021, California accounted for ~1 in 10 births in the U.S.
- # of births in CA declined by 21% from 2014 to 2024 (CDPH)
- 98% of births occurred in a hospital.
- Of the 2% that occurred outside hospitals, 62% occurred at home and 30% occurred at a freestanding birth center.



Births and Population by Region (2021)

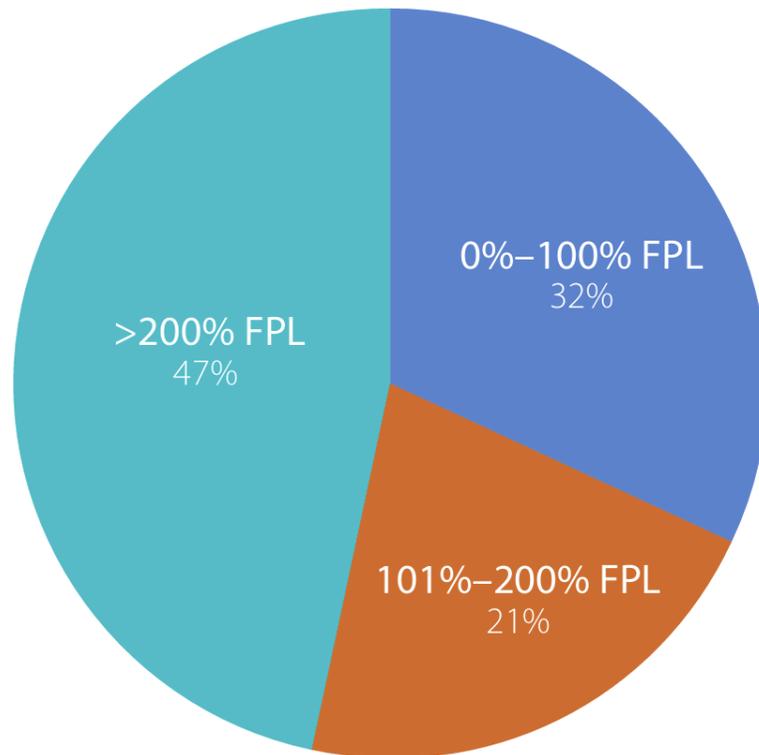


Births by Mother/Birthing Person's Race/Ethnicity

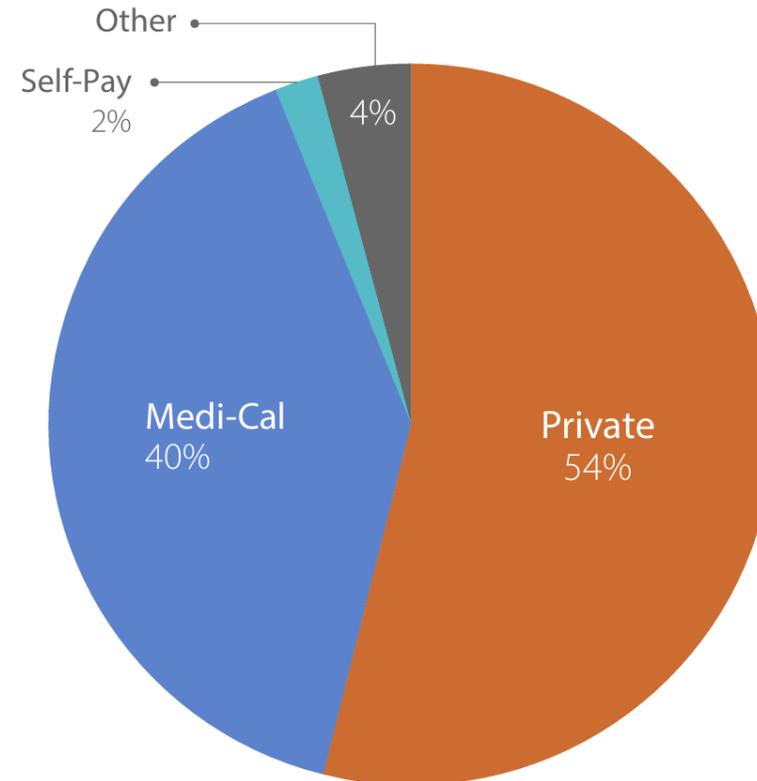


Births by Household Income & Insurance Type

Births, by Household Federal Poverty Level
California, 2018 to 2020

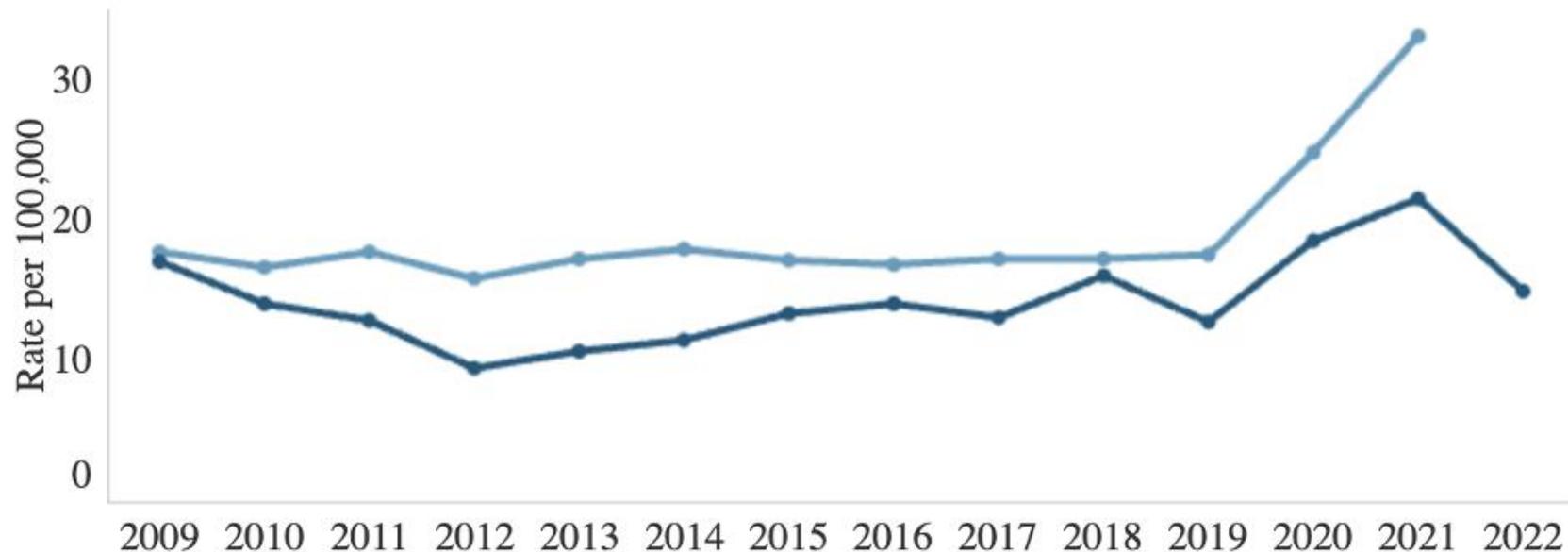


Births, by Expected Payment Source
California, 2021



California has a lower rate of pregnancy-related deaths than the US overall

United States vs. **California** - 2009 – 2022 (CDPH)

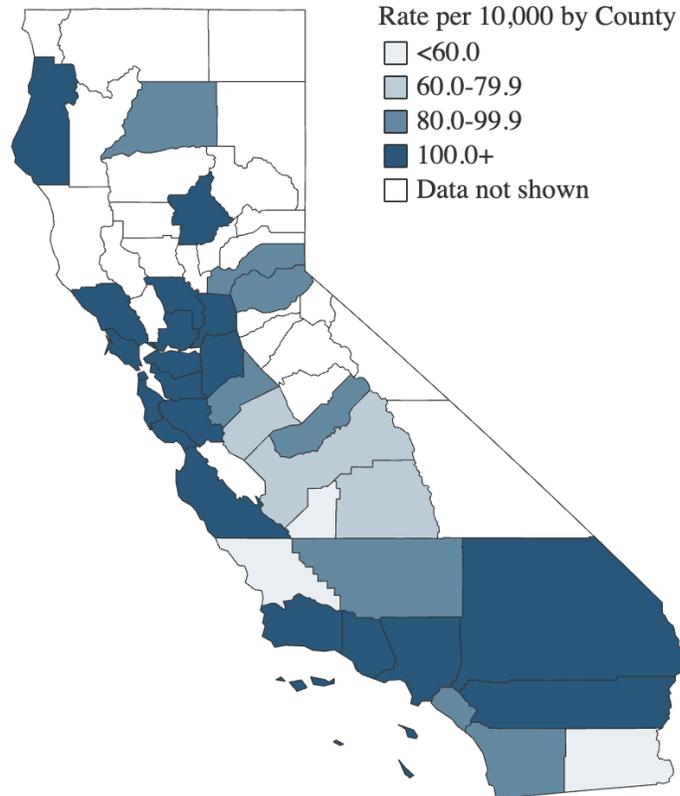


65% of deaths take place postpartum

Vast majority deemed preventable

High & rising rates of serious maternal morbidity

Life-threatening complications per 10,000



Healthy People 2030 Target

68.1

Severe Maternal Morbidity Rate

California

118.4

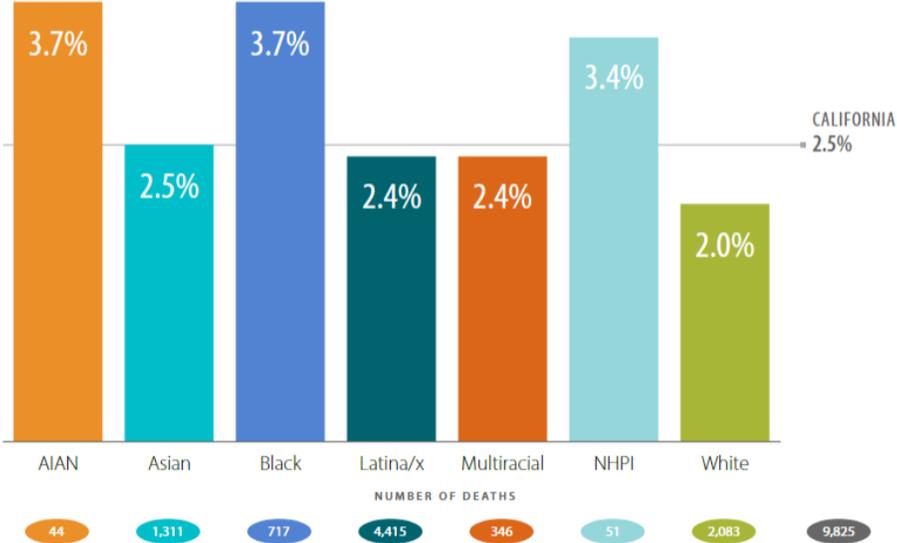
Severe Maternal Morbidity Rate 2024

Only 3 counties meet national Healthy People 2030 target:

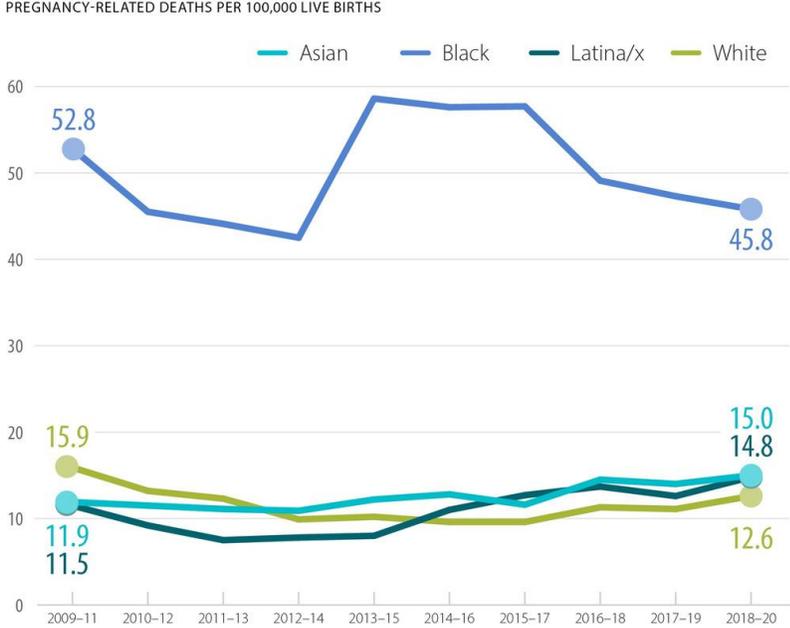
1. San Luis Obispo
2. King
3. Tulare

Racism-based inequities in morbidity & mortality

Severe Maternal Morbidity, by Race/Ethnicity
California, 2021



Pregnancy-Related Mortality, by Race/Ethnicity
California, 2009 to 2020



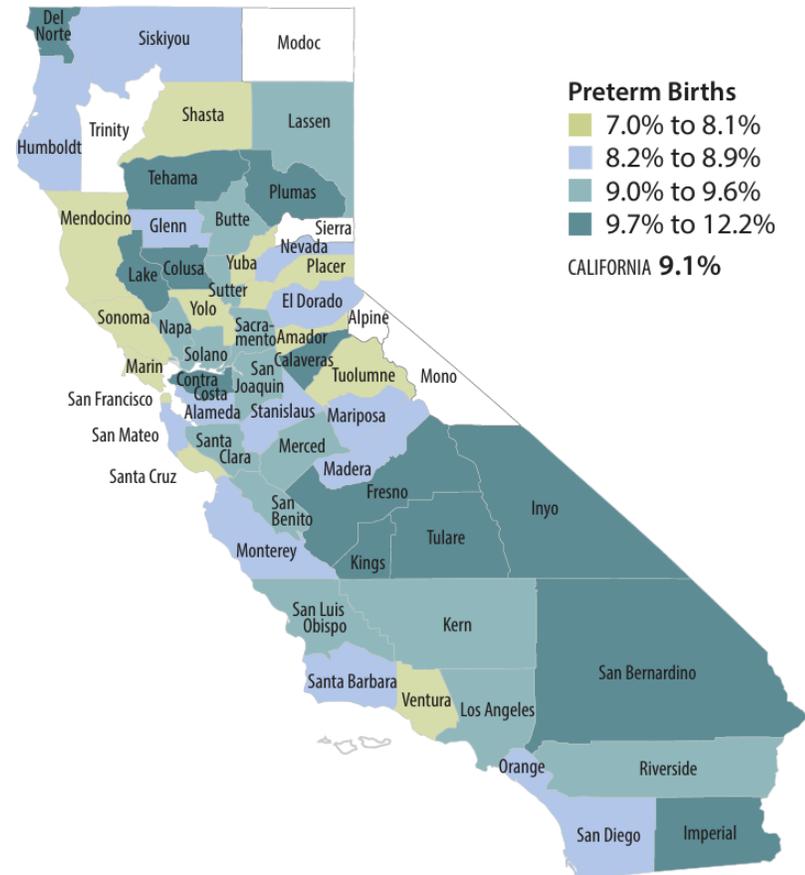
Notes: *Pregnancy-related mortality* is a death while pregnant or within one year of the end of pregnancy — regardless of the outcome, duration, or site of the pregnancy — from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (including suicide, homicide, or drug overdose). Three-year moving average was used. Source uses *Hispanic*.
Source: "Pregnancy-Related Mortality," California Dept. of Public Health, last updated March 9, 2023.

CALIFORNIA HEALTH CARE FOUNDATION

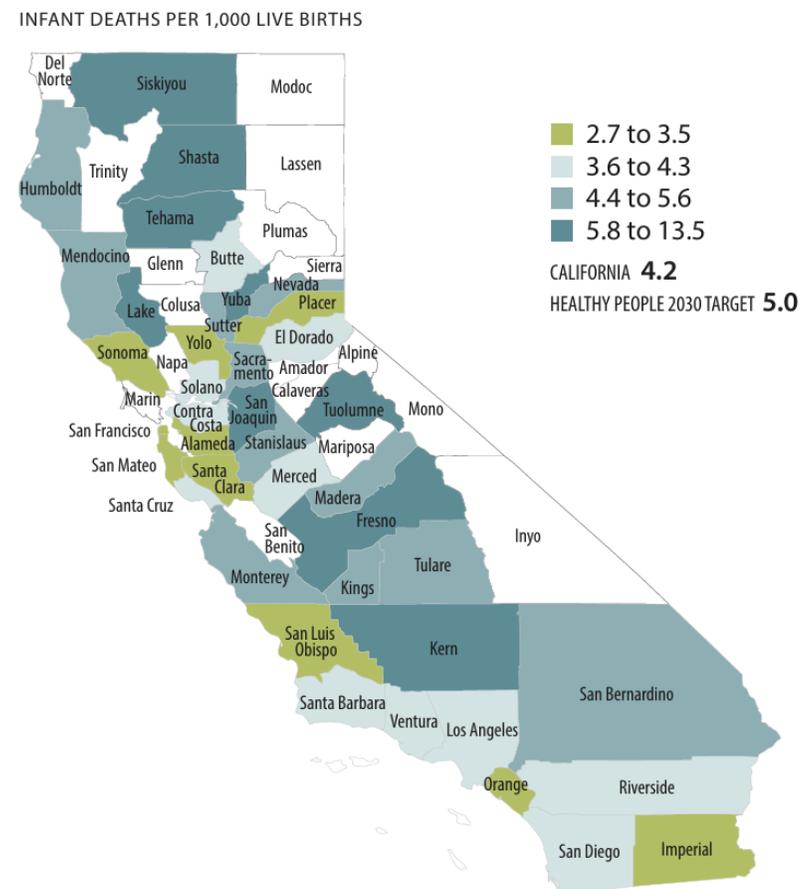


Infant Health Outcomes

Preterm Birth Rates, by County
California, 2021



Infant Mortality, by County
California, 2018 to 2020



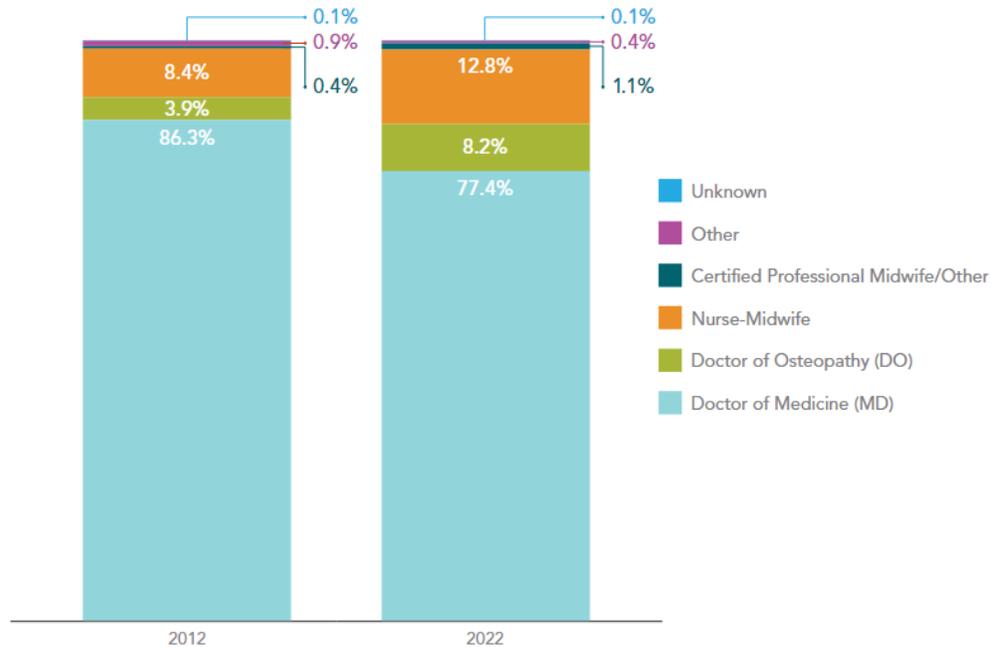
Access to Perinatal Care

Perinatal care is part of primary care

- *Types of care:* “pre-conception care,” prenatal care, birth, postpartum, transition to ongoing primary care, abortion care
 - Mental/behavioral health
 - Lactation support
 - Physical therapy
 - Infant care
- *Where care happens:*
 - Outpatient offices & clinics, including community health centers
 - Hospitals
 - Homes
 - Telemedicine

Midwives are underused. Family practice data is limited

Births by Attendant
California, 2012 and 2022



Across countries: midwifery care associated with lower mortality, appropriate for ~80% of pregnancies

Midwives attend...

~14% of births in California

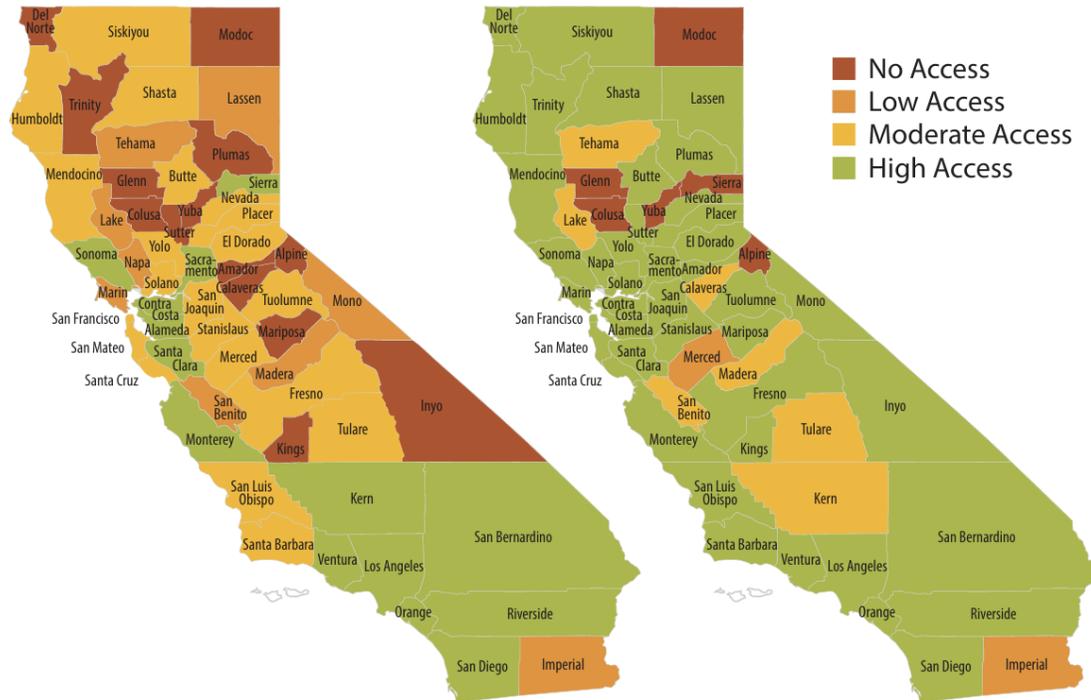
~14% of births nationally (~30% VT, Alaska)

CA has ~3 midwives/1000 births

Compared to 30-70/1000 births in comparable wealthy countries

CA access to perinatal care

Access to Maternity Care Providers California, 2022



Access to Hospital with
Obstetrics Care or Birth Center

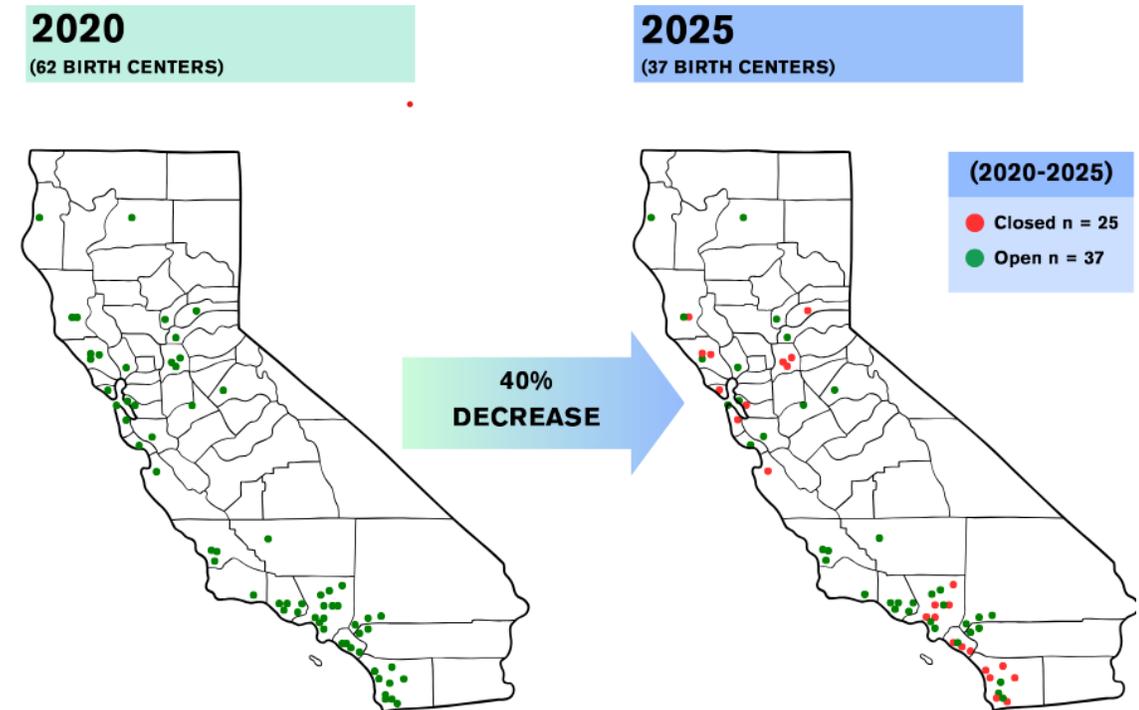
Access to Obstetric Provider

- Map includes OBGYNs & Certified Nurse-Midwives
- (No family practice physicians or licensed midwives)
- *Nationally*, 7.5% of family physicians provide maternity care (more likely in rural, safety-net, academic, or low-access areas)

Labor & Delivery + Birth Center Closures

- 56+ California hospitals have closed labor & delivery units since 2012
 - Disproportionate impact in rural & Latino communities
- Los Angeles County, 2016-2023:
 - 16 hospital L&D closures 2014→
 - >26,500 people sought birth care in emergency departments

40% of freestanding birth centers have closed since 2020



Perinatal Care Experiences

Findings from the 2021-2022 California Maternal and Infant Health Assessment (MIHA)

1 in 10
rarely or never
felt heard and listened to

1 in 3
did not always
feel heard and listened to

1 in 5

Black birthing people rarely or never felt heard and listened to by providers during delivery, far more frequently than other groups.

1 in 8

Latine birthing people rarely or never felt heard and listened to during delivery.

People with income below poverty guidelines were

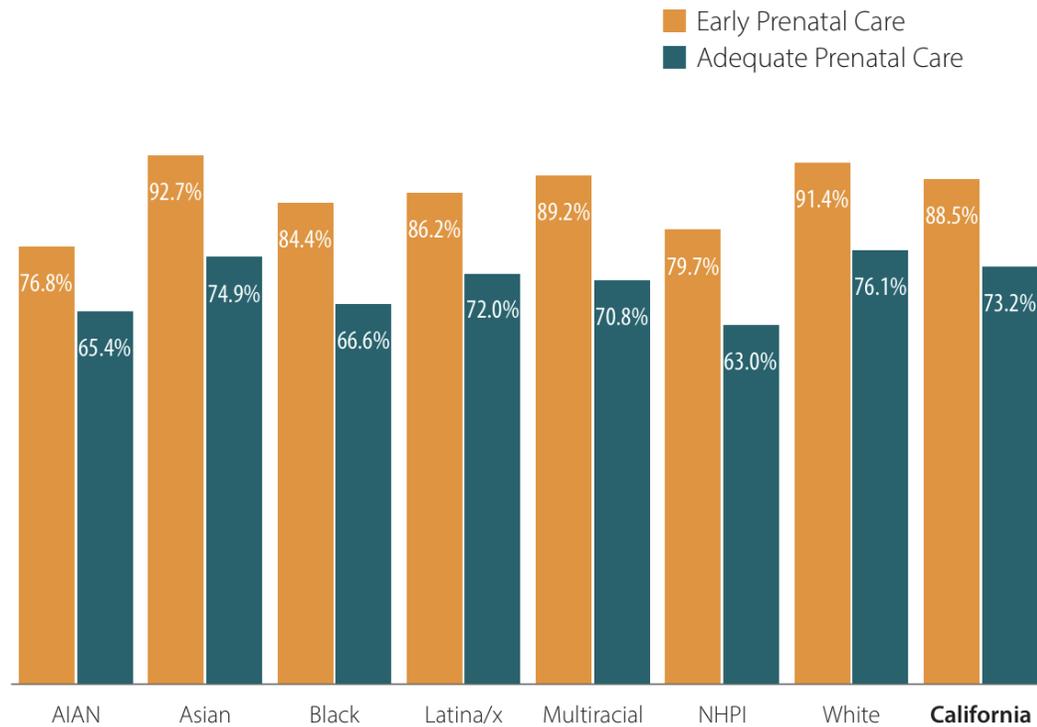
3x
more likely

to report rarely or never feeling heard and listened to during delivery compared to those with higher incomes (>400% of FPG).

Care Quality by Race/Ethnicity

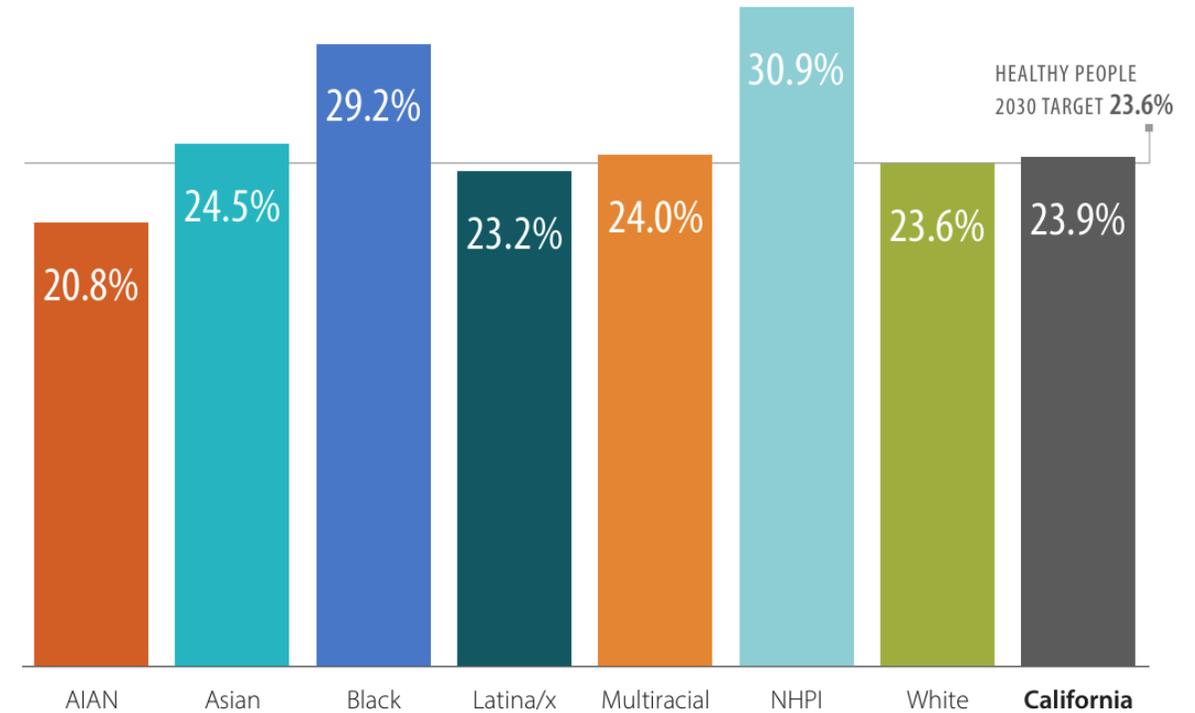
Prenatal Care, by Race/Ethnicity
California, 2021

PERCENTAGE OF LIVE BIRTHS



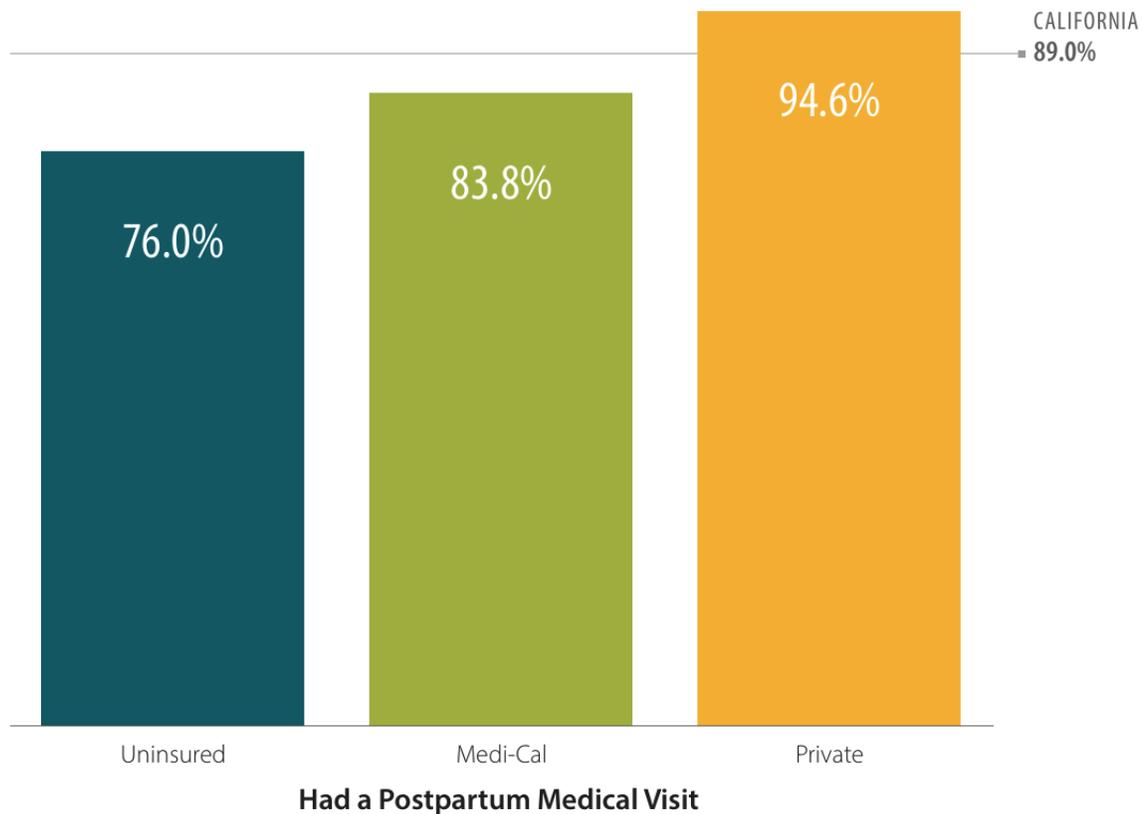
Low-Risk, First-Birth Cesarean Rate, by Race/Ethnicity
California, 2021

PERCENTAGE OF LIVE BIRTHS

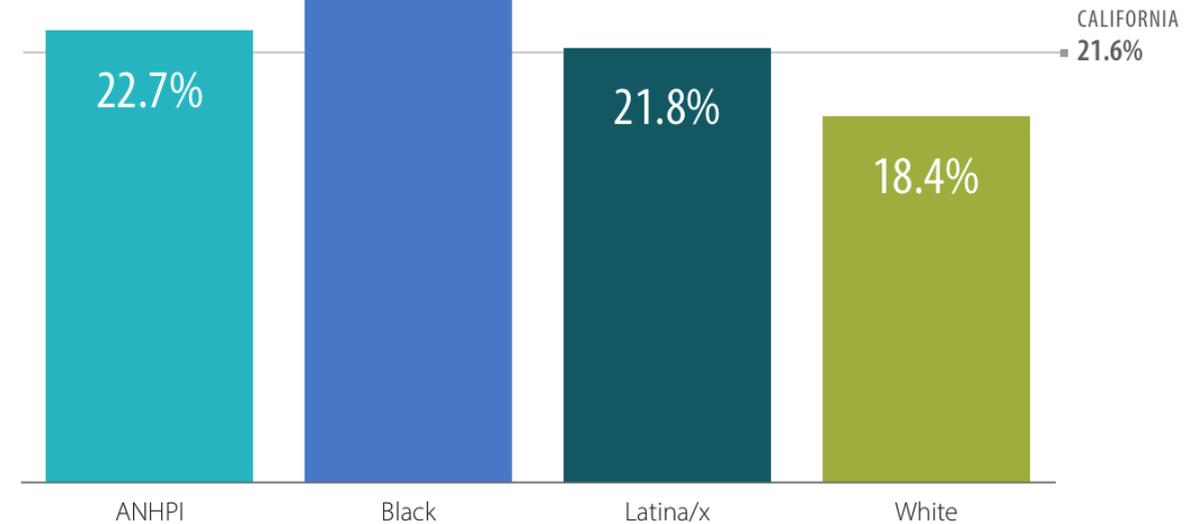


Postpartum Health

Postpartum Care, by Health Insurance
California, 2018 to 2020



Prenatal or Postpartum Depressive Symptoms
by Race/Ethnicity, California, 2018 to 2020



Maternal Health Workforce

General Healthcare Workforce Involved in Perinatal Health

Provider Type	Role in perinatal care	Education & licensing
Medical assistants	Support prenatal & postpartum care	Unlicensed, optional certification
Nurses (RNs, LVNs)	Prenatal, birth & postpartum care	Variable: licensed vocational nurse, associate degree in nursing, bachelor's degree in nursing at accredited schools, state licensure
Community health workers, promoters, patient navigators	Prenatal & postpartum care & support programs <i>growing workforce through recent inclusion in Medi-Cal</i>	Unlicensed, some options for certifications
Behavioral health clinicians (LCSWs, MFTs, psychologists)	Prenatal & postpartum mental health support, including family-level support	Masters or doctoral-level specialized training at accredited schools, state licensure
Physical therapists, chiropractors, acupuncturists	Treat symptoms during pregnancy & postpartum	3-4 years of specialized training at accredited schools, state licensure

Additional health care workers commonly involved:

Nutritionists & dietitians; radiologic technologists (e.g., ultrasound technicians)

Perinatal-specific healthcare workforce

Provider Type	Role in perinatal care	Education & licensing
Certified Nurse-Midwife (CNM)	Lead prenatal, birth, postpartum & abortion care for low-risk pregnancies. <i>Most commonly in hospitals, also practice in birth centers or homes</i>	Masters degree or higher, state licensure. <i>Currently 2 programs in CA: 1 masters, 1 doctoral</i>
Licensed Midwife (LM) <i>Certified Professional Midwife (CPM): national certification</i>	Lead prenatal, birth & postpartum care for low-risk pregnancies. <i>Most commonly practice in freestanding birth centers or homes.</i>	Three-year postsecondary education in accredited midwifery school. State licensure. <i>Currently 0 programs in CA. 2 in development</i>
Doulas	Prenatal, birth & postpartum (emotional, physical, practical support) <i>Newly covered by Medi-Cal</i>	Unlicensed, optional certifications
Lactation consultants (IBCLC)	Postpartum care for parent-infant dyad	Multiple education pathways, national board certification
Lactation counselors	Postpartum care for parent-infant dyad <i>e.g., WIC</i>	Unlicensed, optional certifications

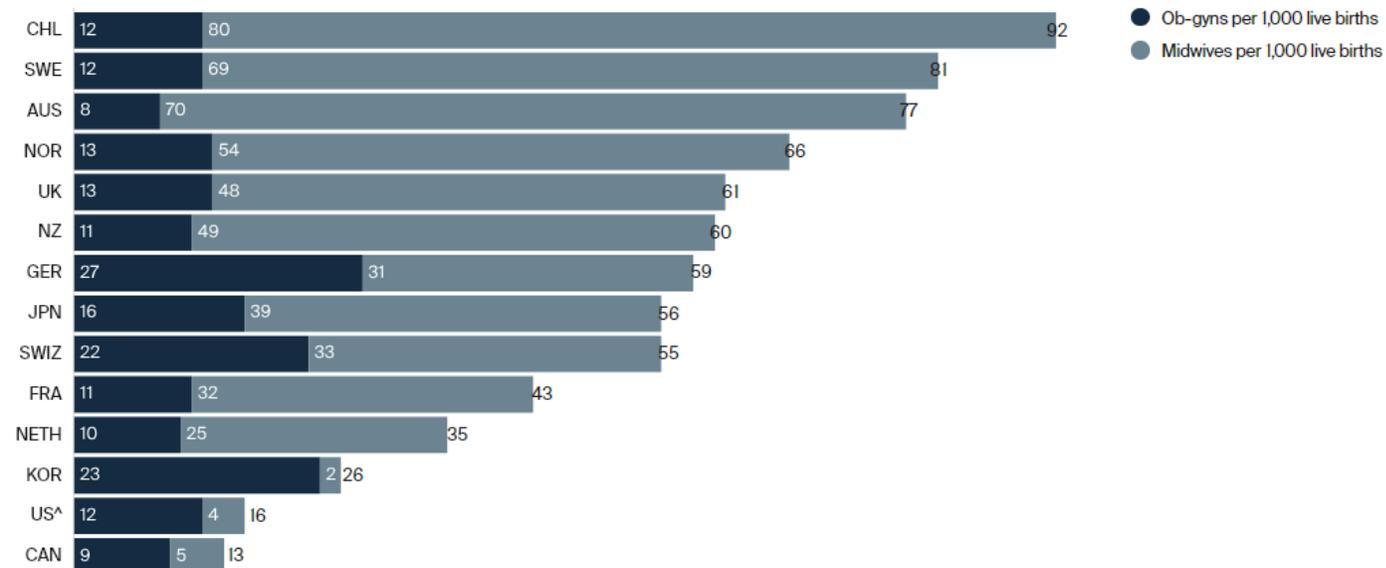
Nurse practitioners, physician assistants & physicians (MD & DO)

Provider Type	Role in perinatal care	Education & Licensing
Nurse practitioners (NP)	Prenatal, postpartum & abortion care. <i>Women's health & family practice NP specialties</i>	Masters degree or higher, state licensure.
Physician Assistants (PA)	Prenatal, postpartum & abortion care.	Masters degree, state licensure.
Family Practice Physicians	Lead prenatal, birth, postpartum & abortion care. <i>Can include cesarean birth</i>	Medical school & 3-year residency, state licensure. <i>Optional 1-year obstetrics fellowship: currently 9 in CA</i>
Obstetrician-Gynecologists (OBGYN)	Lead prenatal, birth (including cesarean, postpartum & abortion care.	Medical school & 4-year residency, state licensure
Maternal-Fetal Medicine Physicians	Specialist perinatal care for pregnancies deemed high-risk	Medical school, 4-year residency, 3-year fellowship, state licensure. <i>Currently 9 fellowships in CA</i>

Perinatal Clinicians By Country & CA Region

The U.S. and Canada continue to have the lowest supplies of midwives and ob-gyns.

Number of providers (head counts) per 1,000 live births*



Notes: * The sum figures shown to the right of the horizontal bars do not reflect the total maternity care workforce, since primary care physicians/family practitioners also deliver some care in many countries (not shown here). Each sum may not reflect the arithmetic sum of figures shown for ob-gyn and midwife providers because calculations were performed on exact figures, while the graph presents rounded figures.

Data: OECD Health Statistics 2023 data extracted on February 29, 2024, representing "practicing midwives" for all countries except CAN, CHL, and US, where data reflect midwives "licensed to practice." Data for professionals "licensed to practice" tend to be higher than data for "professionally active," while numbers of "practicing" professionals tend to be the lowest. 2021 data for FRA, GER, NETH, NZ, NOR, SWIZ, and US (ob-gyns); 2020 data for AUS, CAN, CHL, JPN, KOR (ob-gyns), SWE, and UK; 2016 for US (midwives); 2015 for KOR (midwives).

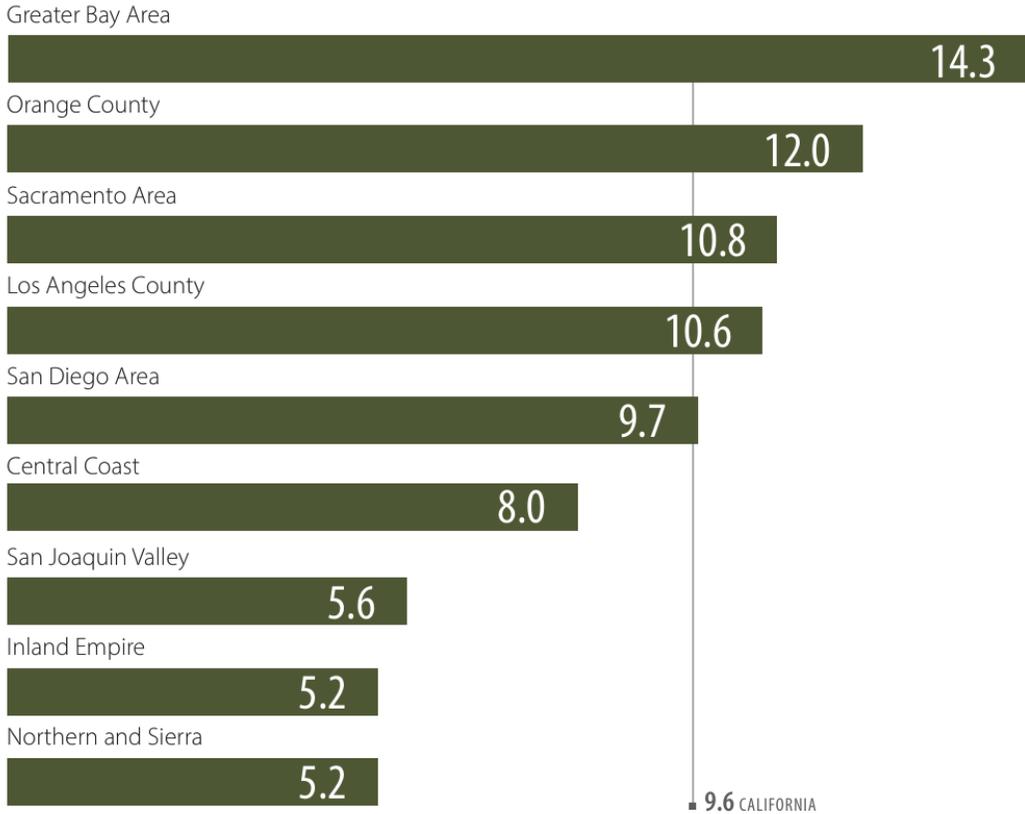
Source: Munira Z. Gunja et al., *Insights into the U.S. Maternal Mortality Crisis: An International Comparison* (Commonwealth Fund, June 2024). <https://doi.org/10.26099/cthn-st75>

- 9 Counties have no **OBGYN** (Modoc, Trinity, Glenn, Colusa, Sierra, Yuba, Mono, Alpine, Mariposa). Half have **midwives**; 1-2 have **family practice physicians**.
- Northern & Sierra regions: greatest proportion of midwives per capita (**LMs and CNMs**), despite limited access overall
- **CNMs & family practice doctors** more likely than OBGYNs to practice in rural areas and Health Professional Shortage Areas (HPSAs).

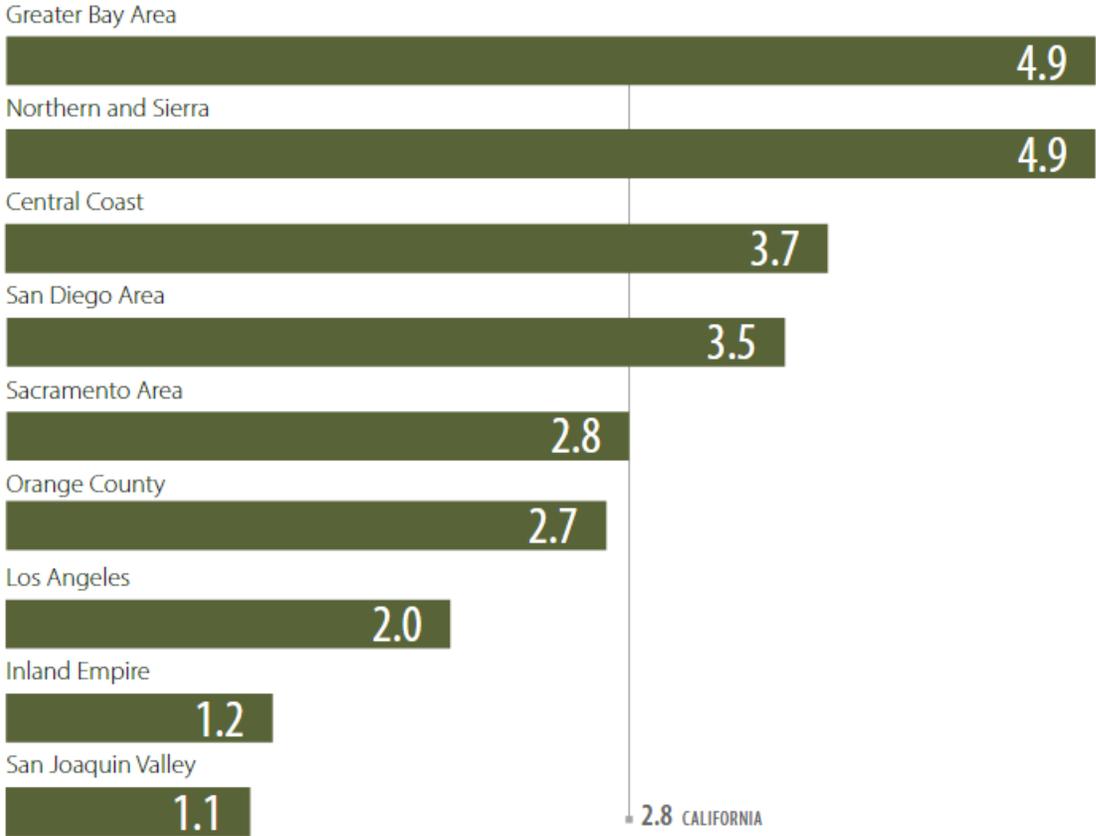
https://www.chcf.org/wp-content/uploads/2024/09/MidwifeWorkforce_Demographics.pdf

Practicing Nurse-Midwives & OBGYNs

Active Obstetrician/Gynecologists per 1,000 Live Births by Region, California, 2020



Nurse Midwives per 1,000 Births, by Region California, 2021



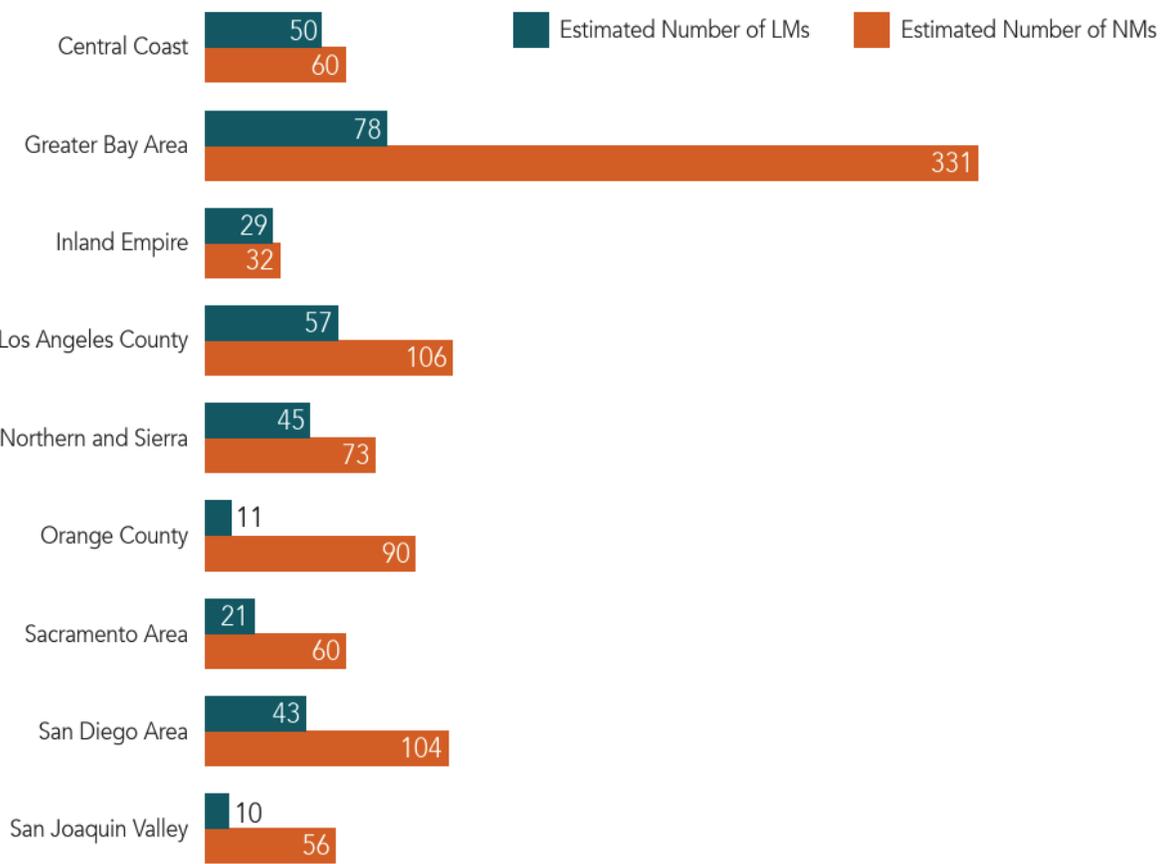
Notes: Nurse midwives are registered nurses who, having received a certificate from the Board of Registered Nursing (BRN), attend cases of normal childbirth and provide prenatal, intrapartum, and postpartum care, including family planning care for mothers / birthing people and immediate care for the newborn. *Birthing people* is used to recognize that not all people who become pregnant and give birth identify as women or mothers. Data include nurse midwives licensed by the BRN in fiscal year 2021 with a California address of record. See Appendix A for a map of counties in each region.

Sources: Author calculation based on "DCA Active License Population by County," California Dept. of Consumer Affairs; and "Births," California Dept. of Public Health, last updated February 6, 2023.

Licensed Midwives & Certified Nurse-Midwives

~80% attend births

Practicing Licensed Midwives and Nurse-Midwives by Region, California, 2023



Practicing Midwives per 10,000 Births by Region, California, 2023



Workforce Challenges & System Gaps

Access to care & clinician maldistribution

- Regional and county-levels differences in access: hospitals, birth centers & clinicians. Health care consolidation.
- Limited data on number of physicians actively attending births or offering perinatal care
- Lack of support for perinatal workforce “pipelines” outside of medicine
 - doula → midwife vs. community college → medical school
- Normalizing & prioritizing high-cost care (high-tech labor & delivery inpatient services, growing NICU construction)
- Current payment models limit hiring for & access to key perinatal services
 - lactation support: multiple team members can provide, requires extended visits

Broad systems challenges affect perinatal care

- Reimbursement: specific challenges for midwives, Medi-Cal challenging for independent/small practices, payment for team-based care
- Typical structure of care inappropriate for pregnancy & postpartum: brief visits, individual clinician, single postpartum visit
- Clinician workforce does not represent patient population
 - need for linguistically concordant care
- Lack of investment in primary care: younger clinicians less likely to choose
- Efforts to address health care worker burnout: increasing numbers of clinicians in part-time practice, clinician unions

Federal changes will affect perinatal care

- HR1: Eliminated GradPLUS loans, which previously covered all "cost of attendance" expenses for any graduate degree.
 - Nurses, midwives, nurse practitioners, physician assistants, behavioral health clinicians no longer "professional degrees" and set to have lifetime cap of \$100,000 total.
- Reductions in support for trainee & workforce diversity, including community college, medical residency, loan changes
- Multiple efforts to limit contraception, abortion & well-person care
- Cuts to federal research & programmatic funding (NIH, CDC, others)
- HR1: cuts to Medi-Cal (followed by state cuts to Medi-Cal for immigrants)
- Immigration enforcement: ICE & CBP now present in health care settings

Policy Opportunities & Levers for Change

Recent & Ongoing Efforts in California

- *Addressing predicted clinician shortages:* CalMedForce+, Song-Brown partially fund family practice & OBGYN residencies; Song-Brown funding for LM & CNM education
 - Unfunded 2025 bills: AB836 to understand midwifery education needs; SB520, UC & CSU nurse-midwifery master's programs
- *Strengthening Medi-Cal:* CalAIM, especially Birthing Care Pathways; standing orders for doula benefit; federal Transforming Maternal Health (CMS) funding
- *Protecting abortion care:* Reproductive Health Service Corps, shield laws
- *Supporting equitable birth outcomes:* Perinatal Equity Initiative, Black Infant Health (CDPH), implicit bias training requirements for perinatal workforce (SB464, AB2319)
 - Sacramento public health department: scholarships for midwifery students to serve Black families
- *Community-initiated care innovation:* group visits (e.g., Centering Pregnancy) improve outcomes, patient experience & clinician retention

Opportunities to improve perinatal health

- *Remove inappropriate building requirements* for freestanding birth centers (HCAI, “Freedom to Birth Act” AB55)
- *Expand & diversify the workforce*: midwifery education, training pathways across roles (Licensed Midwife training in community college, Indigenous doulas)
- *Support interprofessional collaboration*: during training & practice (CMQCC Community Birth Transfer Initiative)
- *Enhance Medi-Cal reimbursement*: group prenatal & postpartum care, proposed Midwifery Payment Model (Midwifery Access California), use extension to 12 months postpartum & Birthing Care Pathways
- *Protect immigrant families*: universal Medi-Cal access, language-concordant workforce, home-based care
- *Prioritize primary care workforce*: safety-net clinics, birth centers, home and community-based care
 - Prioritize postpartum & whole-person care including mental health, lactation

Acknowledgements and Discussion

Acknowledgements: Kim Dau, Liz Donnelly, Sarah Garrett, Jessica Harrison, Wilhelmina Peragine, Paige Prater, Holly Smith, Tanya Khemet Taiwo, Chanda Williams



Additional Background

Midwives in California: LMs & CNMs

Education and Regulation



CNMs

Nurse-midwifery education program (typically 2-4 years) approved by the Board of Registered Nursing (BRN)



American Midwifery Certification Board Exam (AMCB Exam) → confers Certified Nurse-Midwife (CNM) credential



CNMs are regulated by the Board of Registered Nursing

LMs

Midwifery education program that is at least 3 years in length & approved by the Medical Board of California (MBC)



North American Registry of Midwives Board Exam (NARM exam) → confers Certified Professional Midwife (CPM) credential (referred to as LMs in California)



LMs are regulated by the Medical Board of California

More information:

- [California's Midwives: How Scope of Practice Laws Impact Care](#) (2019) California Health Care Foundation
- [Comparison of Certified Nurse Midwives, Certified Midwives, and Certified Professional Midwives](#) (2022) ACNM
- [Understanding California's Midwife Workforce](#) (2024) California Health Care Foundation