

**Karen Ramstrom, DO, MSPH**  
**Brief Biography, August 2023**

Dr. Ramstrom is a Preventive Medicine/Public Health and Family Medicine physician trained with the University of Colorado and the Colorado Springs Osteopathic Foundation. She is Chief of the Maternal Infant Health Branch with the Maternal, Child & Adolescent Health Division at the California Department of Public Health (CDPH). Dr. Ramstrom has worked in the field of public health for 23 years including 12 years with CDPH. From 2018-2022 she was the Health Officer for Shasta County and she previously worked in local public health in Colorado. Prior to her public health career, Karen was a General Medical Officer with the US Army and provided women's health care and primary care for about 10 years.



**Kimberly D. Gregory, MD, MPH**

**Helping Hand of Los Angeles – The Miriam Jacobs Chair in Maternal-Fetal Medicine  
Vice Chair, Women's Healthcare Quality and Performance Improvement, Department  
of Obstetrics and Gynecology  
Cedars-Sinai Medical Center**

Dr. Gregory received her Bachelor of Science degree at University California, Los Angeles (UCLA), and completed her medical training at the Charles Drew University of Medicine & Science/UCLA Medical Education Program. She did her residency training in Obstetrics & Gynecology at Beth Israel Hospital in Boston Massachusetts, and her fellowship training in Maternal Fetal Medicine at University Southern California Women's Hospital. She received a Master's in Public Health from Harvard's School of Public Health.

Board certified in Ob/Gyn and Maternal-Fetal Medicine, she maintains an active clinical practice in high risk obstetrics. She is Vice Chair of Women's Healthcare Quality & Performance Improvement and the Helping Hand Chair in Maternal Fetal Medicine at Cedars Sinai Medical Center. She is the Fellowship and Division Director for the Division of Maternal Fetal Medicine. She is a professor in the Department Ob/GYN at Cedars Sinai, with a joint appointment at the David Geffen School of Medicine at UCLA and the UCLA Fielding School of Public Health Department of Community Health Sciences. Her research interests include cesarean delivery, maternal morbidity and mortality, safety and quality of care in obstetrics, and developing patient reported outcome measures for evaluating maternal satisfaction with the childbirth experience. She has received federal and foundation funding for her research and has over 120 peer-reviewed articles in professional journals.

She has served on numerous regional and national advisory boards and committees including but not limited to American College Obstetricians & Gynecologist (ACOG), the United States Prevention Services Task Force (USPSTF), California Maternal Quality Care Collaborative (CMQCC), National Institute of Health (NIH) Office for Research Women's Health (ORWH), National Quality Forum (NQF), and the Institute of Medicine (IOM). She is currently serving as chair of ACOG Women's Preventive Services Initiative (WPSI) Advisory Board, and Southern California Maternal Mortality Review Committee.

# Improving Maternal Health Outcomes in California

Medical Board of California

August 25, 2023

Karen C. Ramstrom, DO, MSPH  
Kimberly Gregory, MD, MPH



# Today's talk:

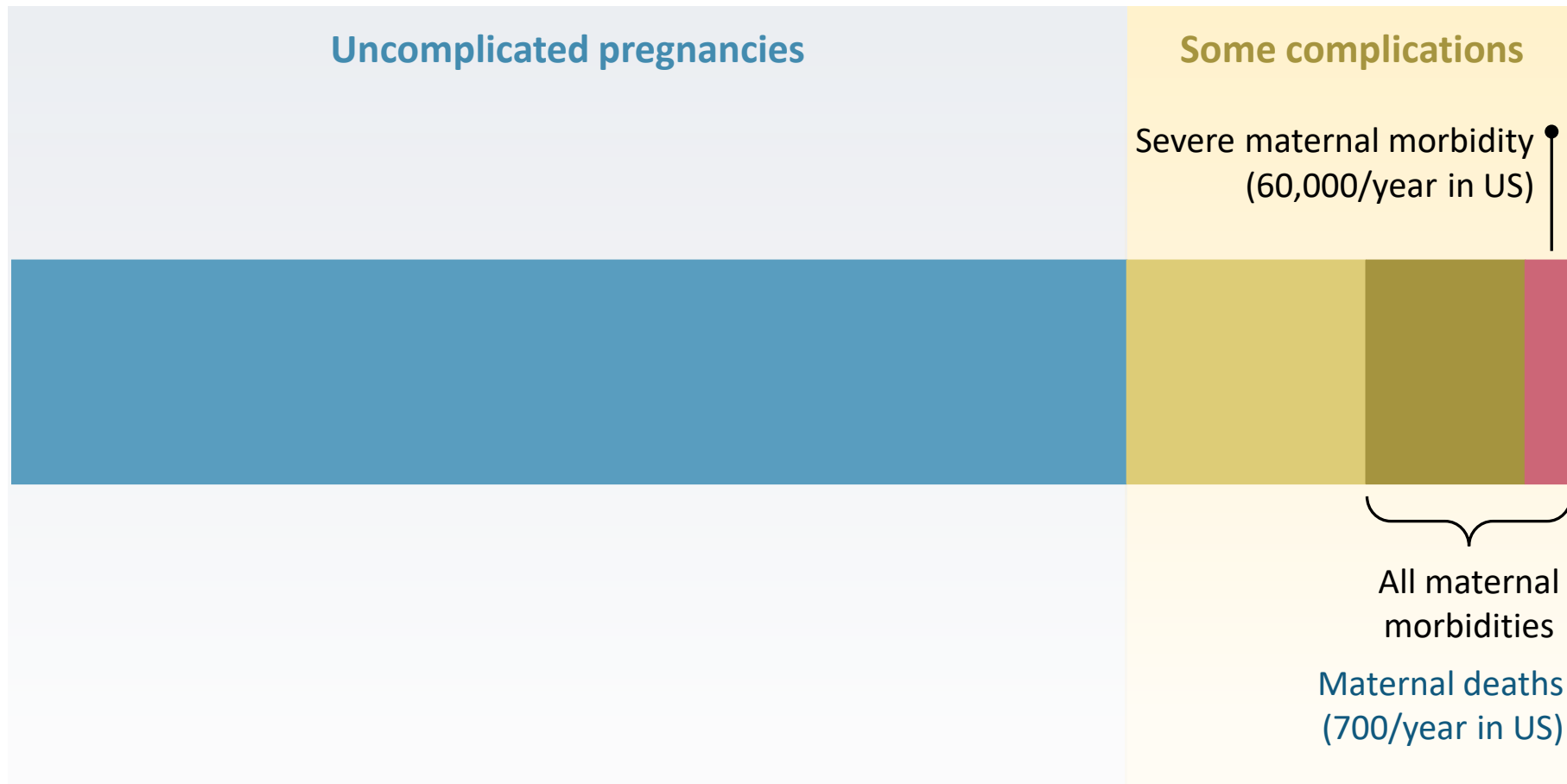
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- ▶ Maternal Mortality – Definitions
  - Where to find data and information
- ▶ Surveillance – CA-PMSS
  - Data on maternal mortality, 2012-2020
- ▶ In-Depth Reviews – CA-PAMR
  - Process
  - Key Findings/Accomplishments
- ▶ From Data to Action – Partnership with CMQCC
- ▶ Maternal Health Promotion at CDPH / MCAH
- ▶ How to reach us



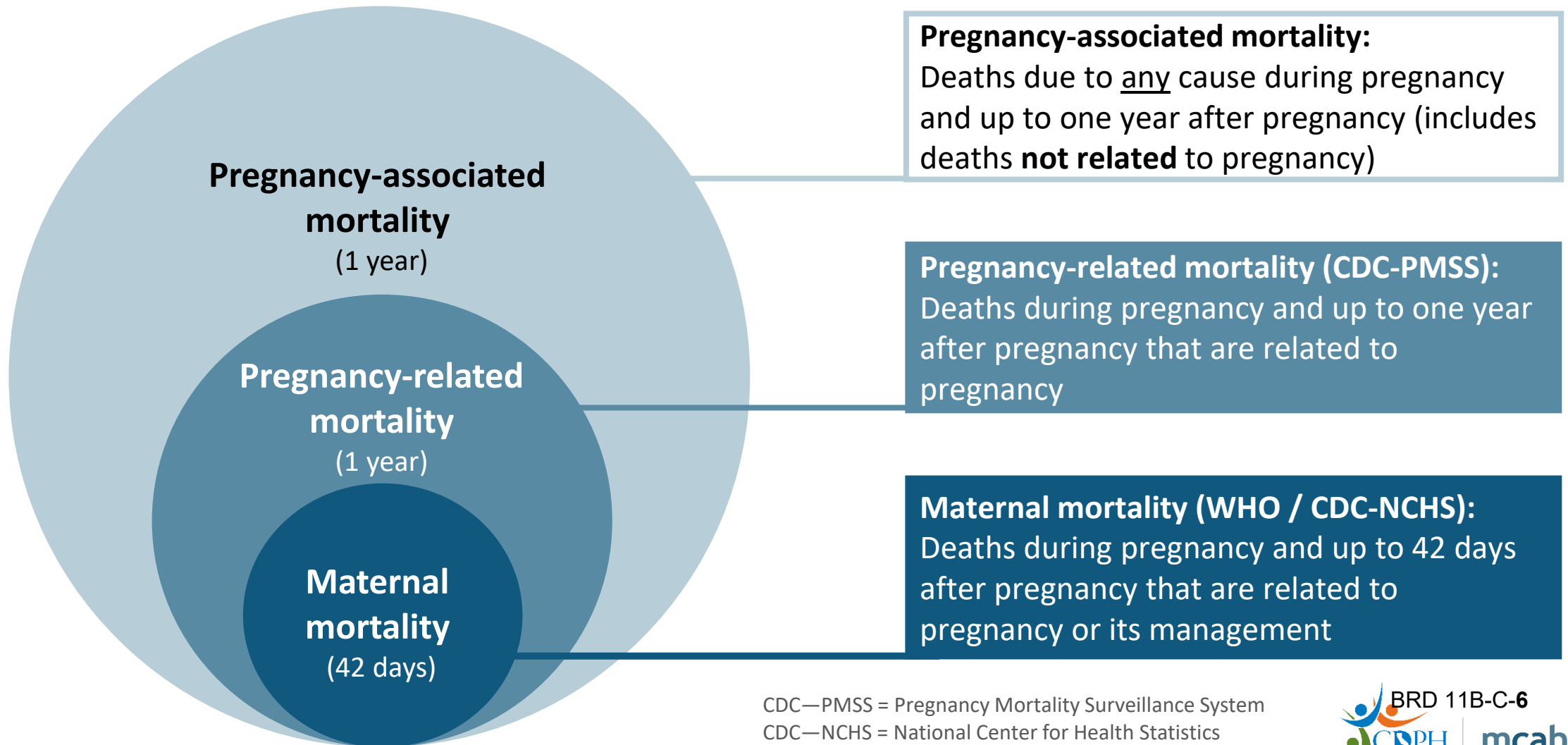
# Serious maternal illnesses and complications are rare.

*Rates of maternal illness and complication during pregnancy*



Source: Eugene Declercq and Laurie Zephyrin, *Severe Maternal Morbidity in the United States: A Primer* (Commonwealth Fund, Oct. 2021)

# Different ways to measure “maternal mortality”



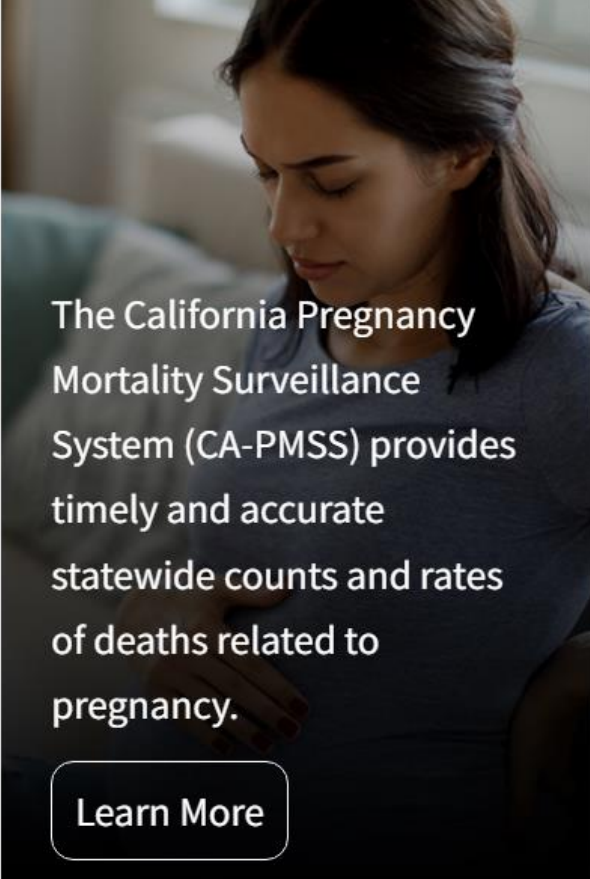
CDC—PMSS = Pregnancy Mortality Surveillance System  
CDC—NCHS = National Center for Health Statistics  
WHO = World Health Organization

CDPH has two programs dedicated to tracking and investigating maternal mortality. Data from these programs can be viewed on the [Pregnancy-Related Mortality Dashboard](#).



Maternal Mortality

### CA-PMSS



The California Pregnancy Mortality Surveillance System (CA-PMSS) provides timely and accurate statewide counts and rates of deaths related to pregnancy.

[Learn More](#)


### CA-PAMR



The California Pregnancy-Associated Mortality Review (CA-PAMR) committees conduct in-depth reviews of deaths among pregnant or recently pregnant Californians to identify prevention opportunities.

[Learn More](#)

### Dashboards



The California Pregnancy-Related Mortality Dashboard shows state-level data on pregnancy-related deaths.

[Learn More](#)

<http://go.cdph.ca.gov/Maternal-Mortality>



# Rapid cycle reviews for Surveillance

California Pregnancy Mortality Surveillance System (CA-PMSS)

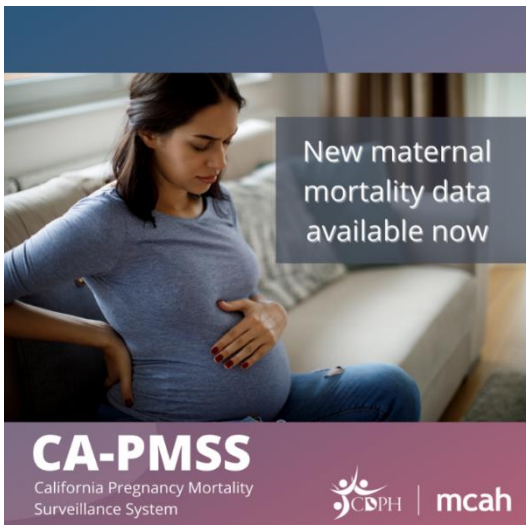


# CA-PMSS Goals and Aims (Surveillance)

## CA-PMSS

California Pregnancy Mortality Surveillance System

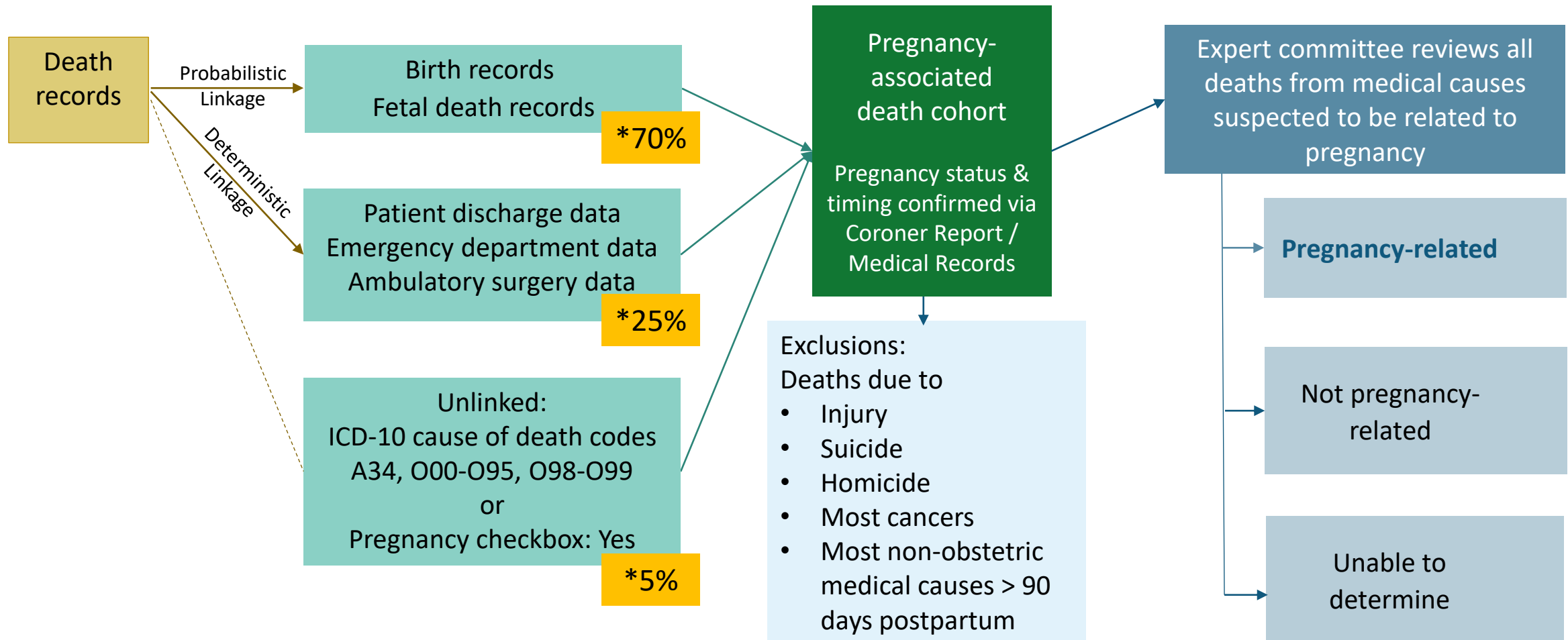
[www.cdph.ca.gov/ca-pmss](http://www.cdph.ca.gov/ca-pmss)



- ▶ Initiated in 2018 to provide timely and accurate pregnancy-related mortality data via surveillance methodology
  - Maternal Mortality Ratio, based on death certificate data, less reliable
- ▶ Aims:
  - Identify the cause of and timing to death
  - Determine whether the death was **related to** pregnancy
  - Serve as an efficient method for enhanced maternal mortality surveillance
  - Inform directions for targeted **in-depth** case reviews of pregnancy-related deaths through CA-PAMR \*

\* California Pregnancy-Associated Mortality Review. [www.cdph.ca.gov/pamr](http://www.cdph.ca.gov/pamr)

# Case Identification and Review via CA-PMSS



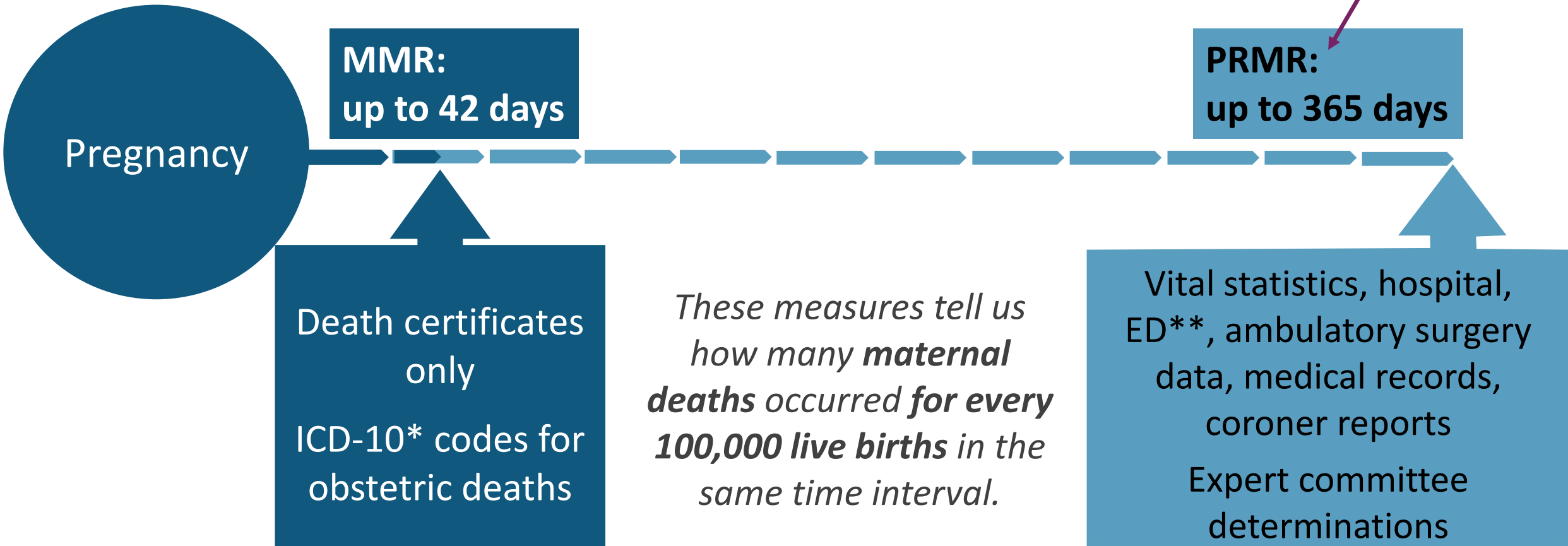
\*Approximate % of cases identified by the method described



# Mortality Data from CA-PMSS

# Measures: Maternal Mortality Ratio (MMR) vs. Pregnancy-Related Mortality Ratio (PRMR)

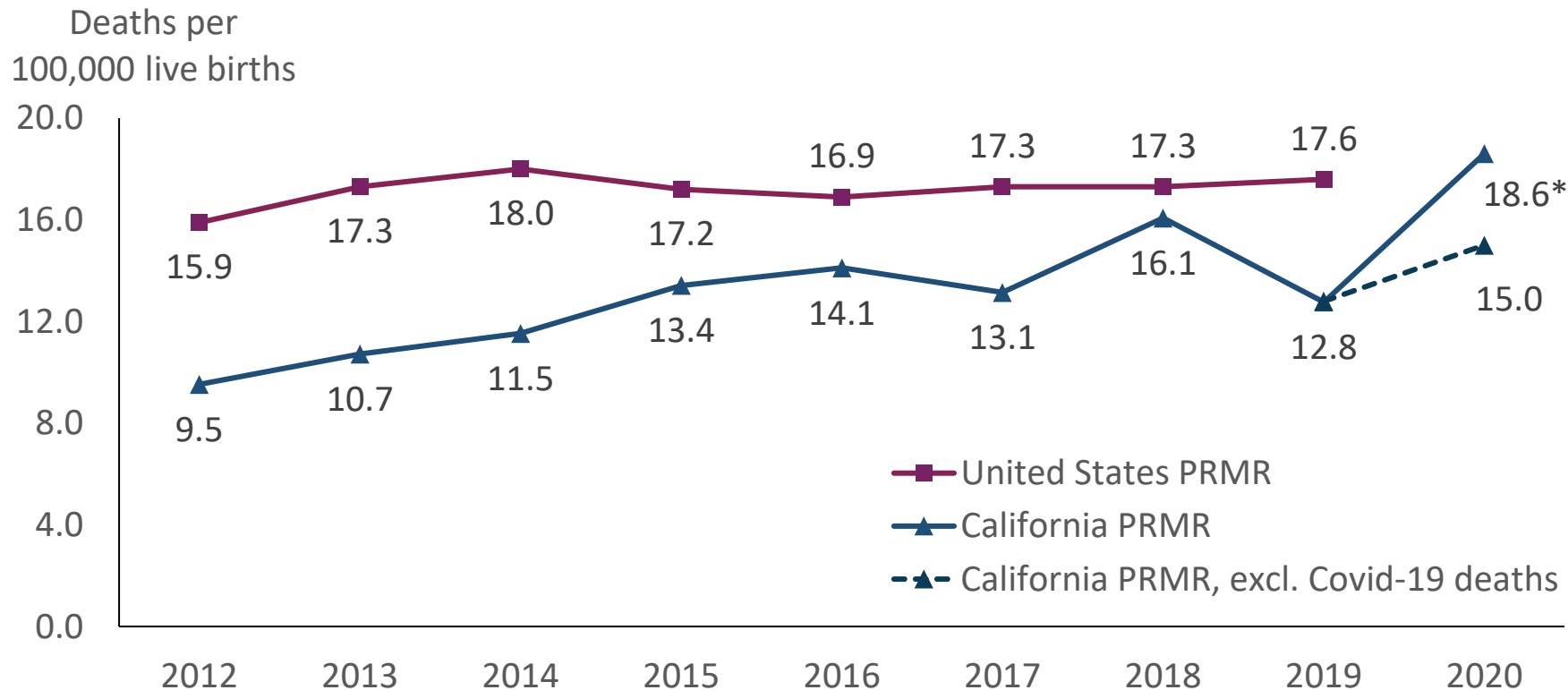
CA-PMSS



\*ICD-10 = International Classification of Diseases, 10<sup>th</sup> edition

\*\* ED = Emergency Department

# Pregnancy-Related Mortality Ratio in U.S. and California 2012-2020



CDC PMSS and CA PMSS both produce PRMRs but methodologies differ.

In CA PMSS:

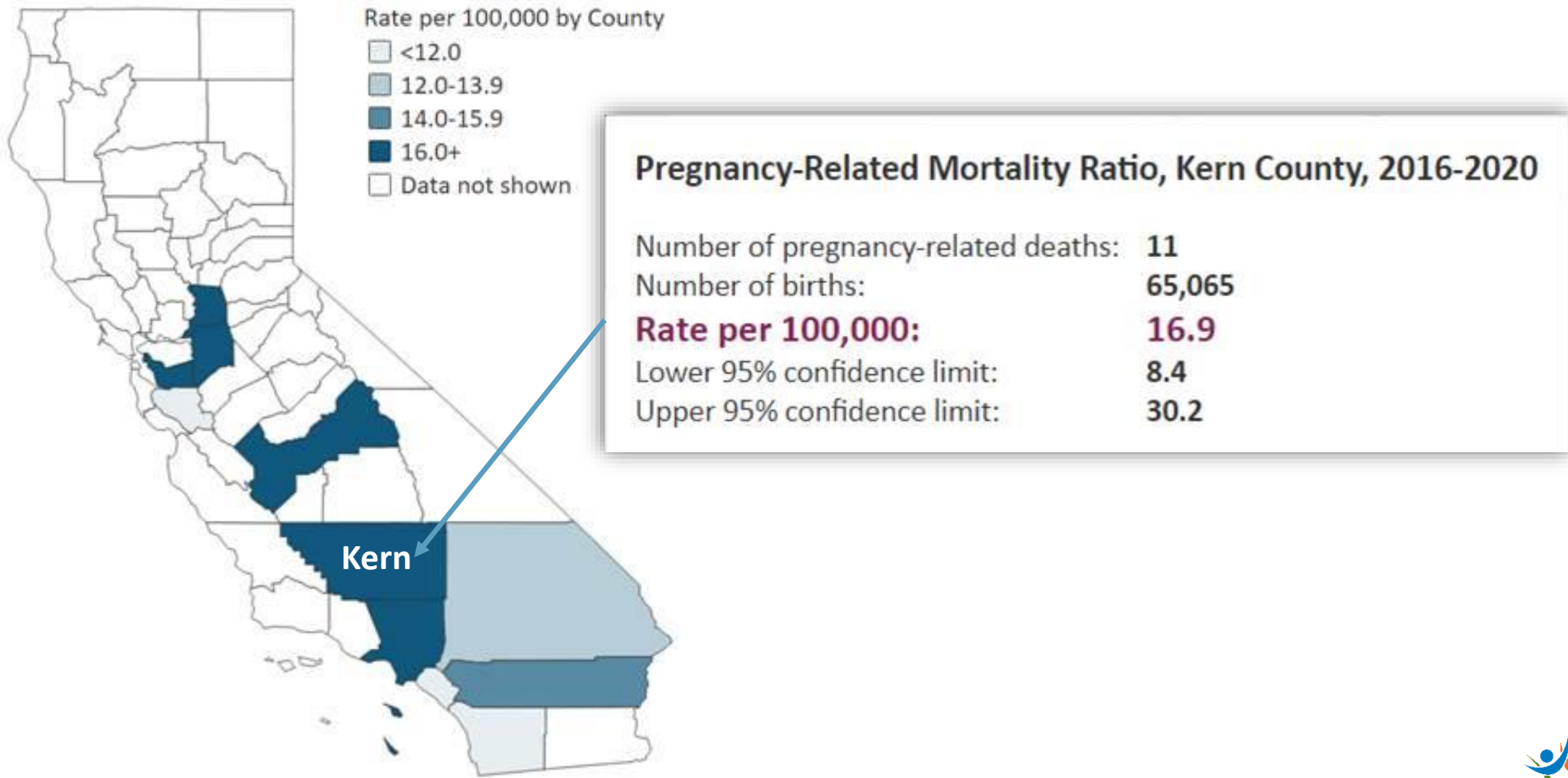
- More data sources used to identify deaths
- Deaths are reviewed by expert committee

Methodological differences make comparison of PRMRs to national or other state data challenging.

Pregnancy-related mortality ratio (PRMR) = Number of pregnancy-related deaths per 100,000 live births, up to one year after the end of pregnancy. Pregnancy-relatedness was determined by expert committee case review process. Data on U.S. PRMR were accessed at [Pregnancy Mortality Surveillance System | Maternal and Infant Health | CDC](#) on April 6, 2023).

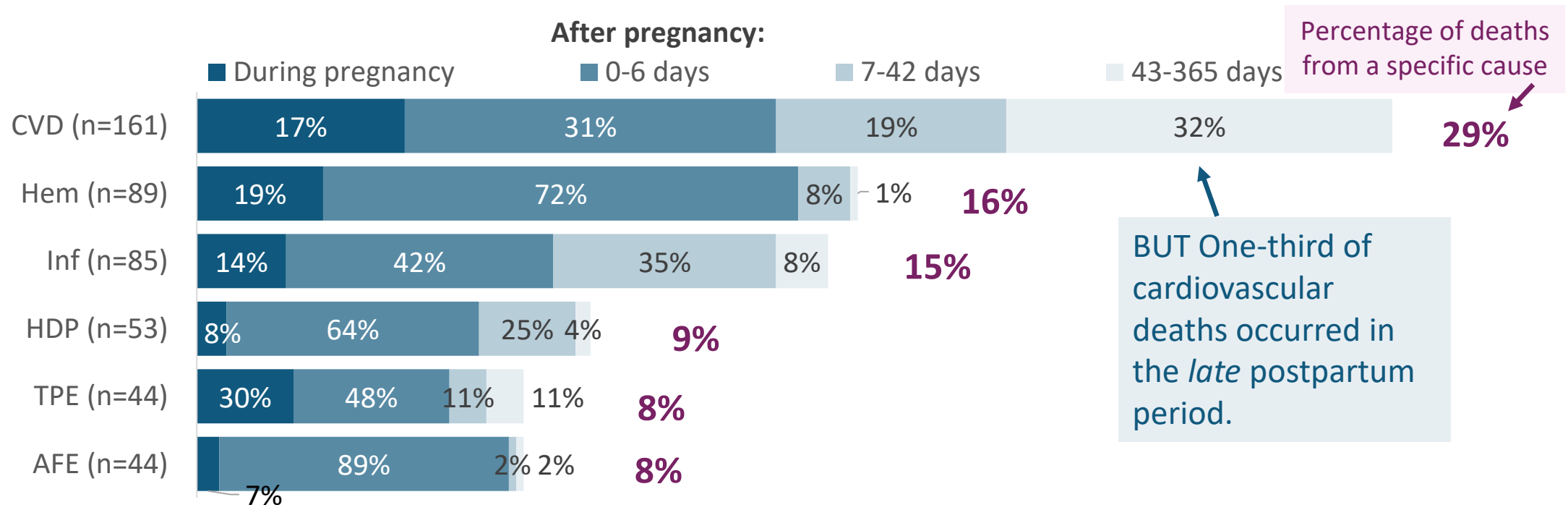
\* The CA 2020 PRMR was significantly higher than the PRMRs in 2012 and 2013

# Pregnancy-Related Mortality Ratio by County California 2016-2020



# Pregnancy-Related Deaths by Cause and Timing to Death California 2012-2020 (N=564)

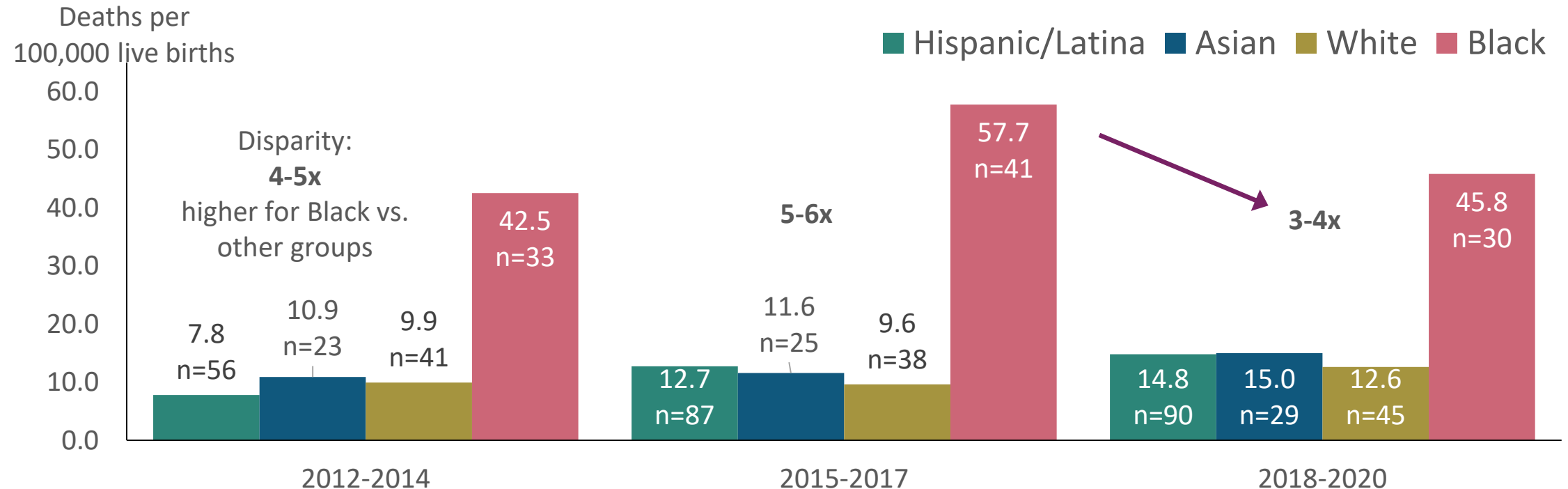
**Cardiovascular (heart) disease was the leading cause of pregnancy-related deaths (before the pandemic). Most pregnancy-related deaths occurred around childbirth.**



Pregnancy-related deaths include deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review. Abbreviations: CVD = Cardiovascular disease; Hem = Hemorrhage; Inf = Sepsis or infection; HDP = Hypertensive disorders of pregnancy; TPE = Thrombotic pulmonary embolism; ; AFE = Amniotic fluid embolism. *Note: Deaths not shown in the above figure were from cerebrovascular accidents (26), anesthesia (10), other medical causes (78) and undetermined (4).*

# Pregnancy-Related Mortality Ratio by Race/Ethnicity California 2012-2020 (N=564)

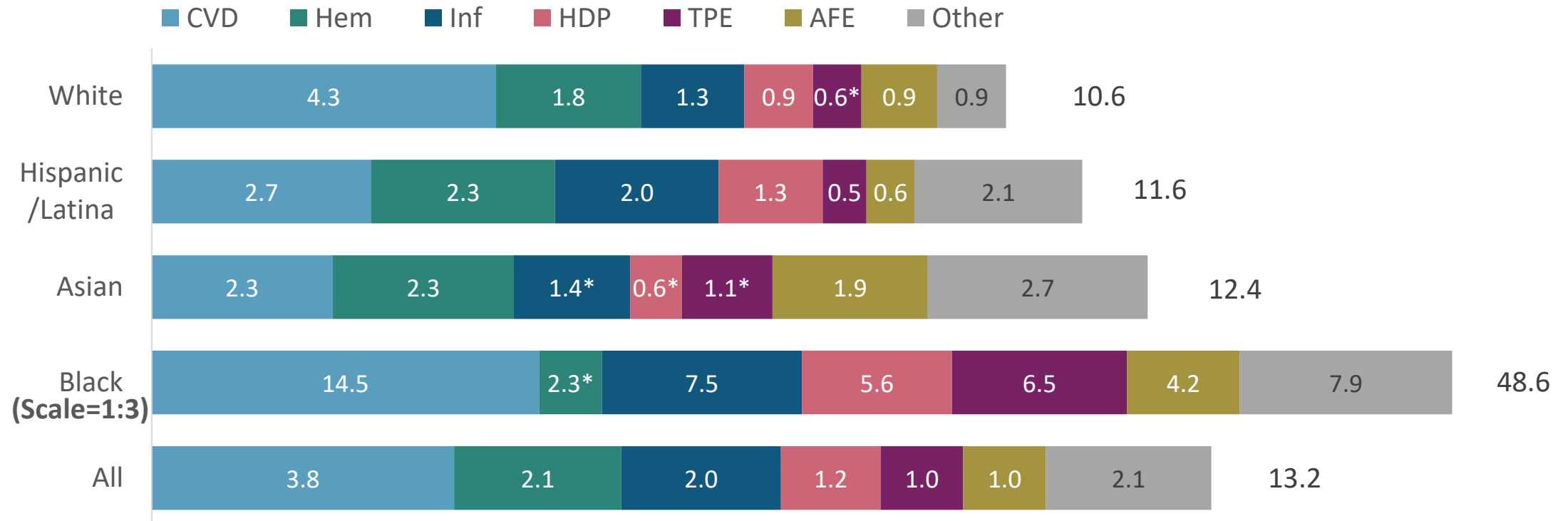
**Racial-ethnic disparities have narrowed but persist.** Black birthing people are 3-4x more likely to die from pregnancy-related causes than other racial-ethnic groups.



Pregnancy-related mortality ratio (PRMR) = Number of pregnancy-related deaths per 100,000 live births. Pregnancy-related deaths include deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review. PRMRs for American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multiple-race and other races are not shown due to small numbers.



# Pregnancy-Related Mortality Ratio by Race/Ethnicity and Cause California 2012-2020 (N=564)

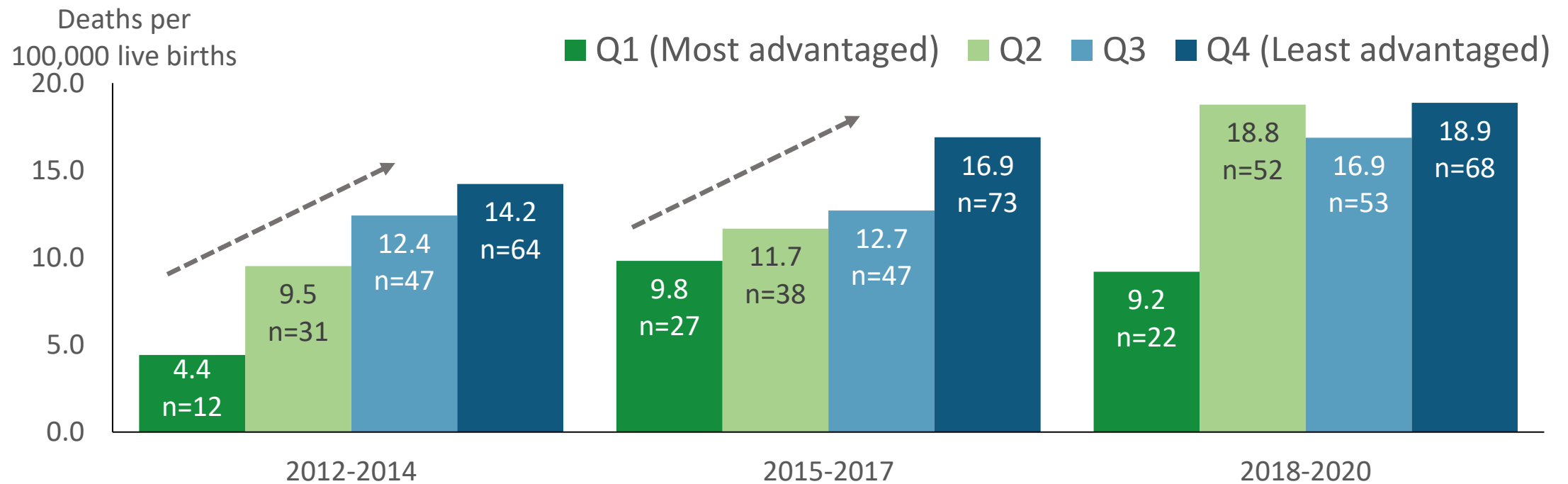


Pregnancy-related mortality ratio (PRMR) = Number of pregnancy-related deaths per 100,000 live births. Pregnancy-related deaths include deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review. Abbreviations: CVD = Cardiovascular disease; Hem = Hemorrhage; Inf = Sepsis or infection; HDP = Hypertensive disorders of pregnancy; TPE = Thrombotic pulmonary embolism; AFE = Amniotic fluid embolism. PRMRs of American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multiple-race and other races are not shown due to small counts

\* Unstable ratio; n<10

# Pregnancy-Related Mortality Ratio by Community Conditions California 2012-2020 (N=564)

**Community well-being shapes maternal health outcomes.** We observed **higher rates** of pregnancy-related deaths among those living in **less advantaged** community conditions.



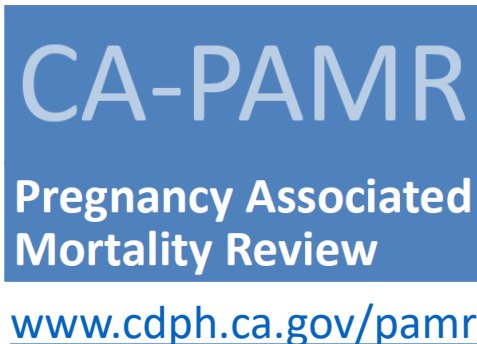
Pregnancy-related mortality ratio (PRMR) = Number of pregnancy-related deaths per 100,000 live births. Pregnancy-related deaths include deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review. Community conditions were measured using the California Healthy Places Index (HPI). Higher HPI percentiles indicate healthier community conditions relative to other California census tracts. Quartile 1 (Q1) is the highest quarter of percentiles indicating most advantaged community conditions, and Quartile 4 (Q4) is the lowest quarter of percentiles indicating the least advantaged community conditions.



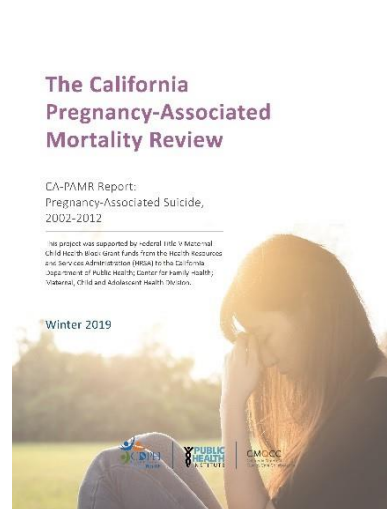
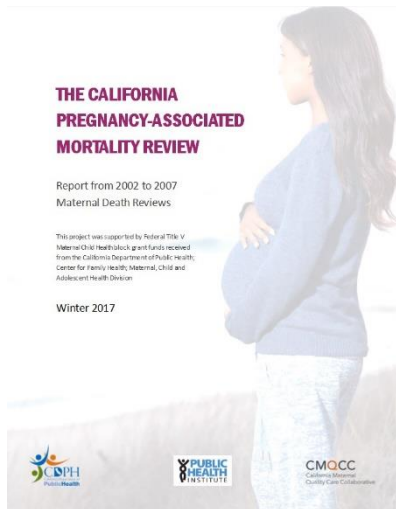
# In-depth reviews for Quality Improvement

## California Pregnancy-Associated Mortality Review (CA-PAMR)

# CA-PAMR Goals and Aims (Quality Improvement)



- ▶ GOAL: To prevent pregnancy-related deaths and eliminate racial/ethnic and other health inequities
- ▶ Begun in 2006, CA-PAMR aims to:
  - Identify pregnancy-related deaths, their causes, and preventability
  - Determine contributing factors and improvement opportunities at the patient, provider, facility, system, and community levels
  - Provide data *and* recommendations to inform action to improve maternal health outcomes



# Maternal Mortality Review (CA-PAMR)

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## IS

- Ongoing, anonymous, and **confidential** process of data collection, analysis, interpretation, and action
- Systematic process guided by policies, statutes, rules, etc.
- Intended to move from data collection to prevention activities

## IS NOT

- A mechanism for assigning blame or responsibility for any death
- A research study
- Peer review
- An institutional review
- A substitute for existing mortality and morbidity inquiries

# Maternal Mortality Review Process involves many iterative steps

Identify pregnancy-associated deaths

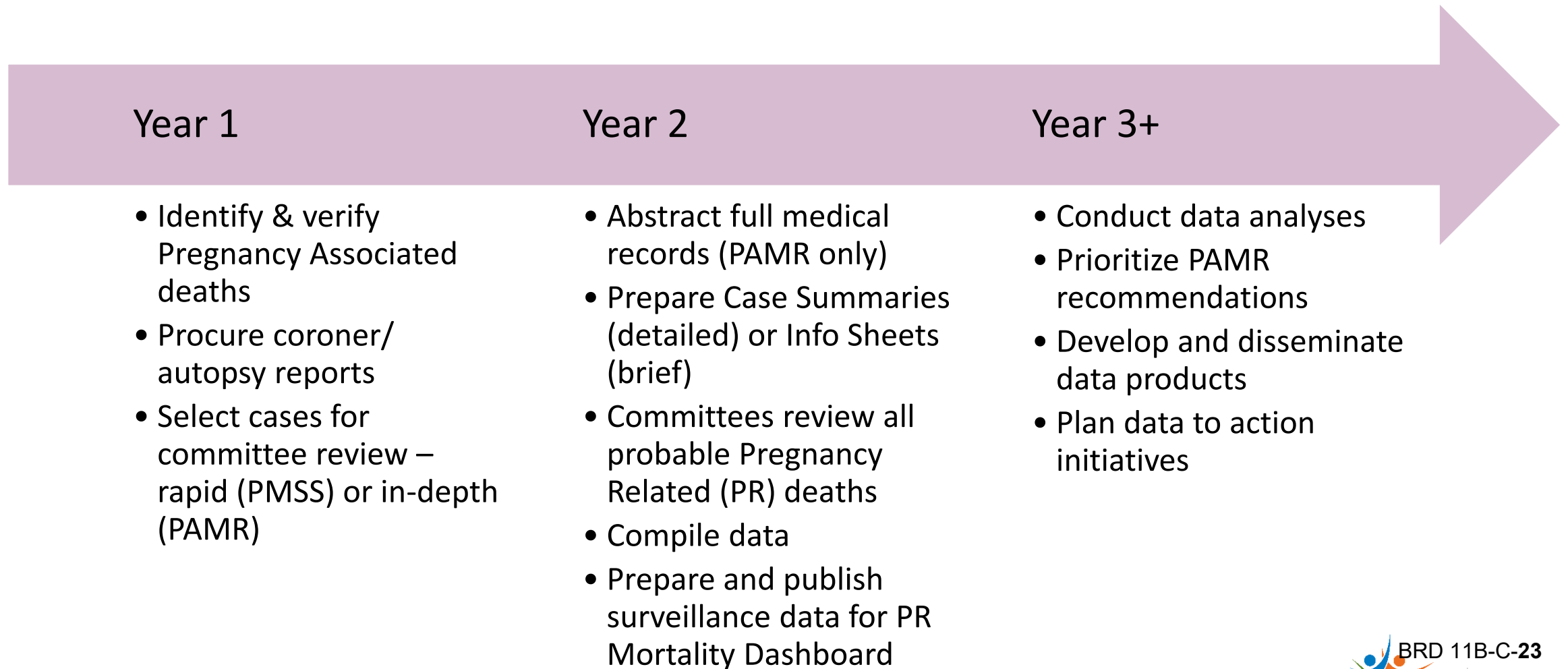
Select deaths for review: Inclusion/exclusion criteria

Abstract data and prepare case summaries: Coroner reports, Autopsy/Toxicology reports, Medical records, Other data

Committee reviews cases: Cause of death, whether related to pregnancy, preventability, contributing factors, improvement & prevention opportunities

Analyze quantitative and qualitative data: Descriptive statistics, Data-informed, actionable recommendations for prevention

# Maternal Mortality Review Process Timeline for One Cohort Year



# Maternal Mortality Reviews: A closer look at the CA-PAMR process & insights

Kimberly Gregory, MD, MPH





# Southern California PAMR Expert Committee

## Kimberly D. Gregory, MD, MPH – COMMITTEE CHAIR



- Priya Batra, MD  
(Obstetrics/Gynecology)



- Stephanie Bryant, RN, PHN, MSN  
(Public Health)



- Lenorre Clarke, MD, MPP  
(Obstetrics/Gynecology)



- Dwayne Cox, MD  
(Anesthesia)



- Shareece Davis-Nelson, MD  
(Maternal Fetal Medicine)



- Kimberly Durdin, CPM, LM, IBCLC  
(Midwifery, Lactation)



- Marianne Gausche-Hill, MD  
(Emergency Medicine)



- Mashariki Kudumu, MPH  
(Public Health)



- Nathana Lurvey, MD  
(Obstetrics/Gynecology)



- Vibha Mahendra, MD  
(Anesthesia)



- Nicole Major, MSW, ASW  
(Social Work)



- Arturo Mendoza, MD  
(Pathology)



- Angie Millan, DNP, RN  
(Nursing)



- Sayida Peprah, PsyD  
(Psychology, Doula Care)



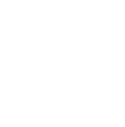
- Yolonda Rogers-Jones  
(Public Health)



- Brenda Ross-Shelton, MD  
(Maternal Fetal Medicine)



- Erin Saleeby, MD, MPH  
(Obstetrics/Gynecology)



- Keya Stallings, MSN, RNC-OB  
(Nursing)



- Lucy R. VanOtterloo, PhD, RNC, CNS  
(Nursing)



- Janet Wei, MD  
(Cardiology)



- Sabreen White, MBA  
(Public Health, Patient Advocacy)

# Guiding Questions for CA-PMSS & CA-PAMR

CA-PAMR So-Cal Committee Review Form		Reviewer Initials _____	PAMR ID# _____
<b>Pregnancy-Related Death?</b>		<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>
<input type="checkbox"/> <b>Unable to Determine</b>			
<i>Pregnancy-related death: The death of a woman during pregnancy or within one year of the end of pregnancy, from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effect of pregnancy.</i>			
<b>Cause of Death (CHOOSE ONLY ONE) – refers to the initiating or critical underlying process responsible for the chain of events leading to the actual death. Examples: Uterine atony leading to DIC, massive transfusions and multi-organ failure. Chronic hypertension leading to hypertrophic cardiomyopathy leading to heart failure.</b>			
<input type="checkbox"/>	<b>Amniotic Fluid Embolism (AFE)</b>	<input type="checkbox"/>	<b>Hypertensive Disorder &amp; Mechanism of death</b> (Fill out both for all hypertensive deaths)
<input type="checkbox"/>	<b>Anesthesia complications</b>	<input type="checkbox"/>	
<input type="checkbox"/>	<b>Cardiomyopathy</b>	<input type="checkbox"/>	
<input type="checkbox"/>	Peripartum/Postpartum	<input type="checkbox"/>	
<input type="checkbox"/>	Hypertrophic	<input type="checkbox"/>	
<input type="checkbox"/>	Other, specify:	<input type="checkbox"/>	Chronic hypertension with preeclampsia
<input type="checkbox"/>	<b>Other Cardiovascular Disease (CVD)</b> (includes myocarditis, myocardial infarction, pulmonary hypertension, hypertensive CVD, coronary artery disease, vascular aneurysm/dissection, congenital/acquired valvular heart disease, arrhythmia, other)	<input type="checkbox"/>	Chronic hypertension without preeclampsia
<input type="checkbox"/>	Specify:	<input type="checkbox"/>	<b>Mechanism – for hypertensive deaths only:</b>
<input type="checkbox"/>	<b>Cerebrovascular Accident (CVA)</b> (includes hemorrhage, thrombosis, malformation, aneurysm; excludes stroke from hypertension)	<input type="checkbox"/>	CVA (Stroke)
<input type="checkbox"/>		<input type="checkbox"/>	Coagulopathy (DIC)
<input type="checkbox"/>		<input type="checkbox"/>	Liver failure
<input type="checkbox"/>		<input type="checkbox"/>	Seizure / Anoxia
<input type="checkbox"/>		<input type="checkbox"/>	Other mechanism, specify:
<input type="checkbox"/>	<b>Hemorrhage</b>	<input type="checkbox"/>	<b>Infection</b>
<input type="checkbox"/>	Atony or other uterine bleeding	<input type="checkbox"/>	Postpartum genital tract (includes uterus, pelvis, peritoneum, necrotizing fasciitis)
<input type="checkbox"/>	Retained placenta/products of conception	<input type="checkbox"/>	Sepsis/septic shock
<input type="checkbox"/>	Uterine rupture	<input type="checkbox"/>	Chorioamnionitis/antepartum infection
<input type="checkbox"/>	Laceration / Intra-abdominal bleeding	<input type="checkbox"/>	Urinary tract infection
<input type="checkbox"/>	Placental abruption	<input type="checkbox"/>	Influenza
<input type="checkbox"/>	Placenta previa	<input type="checkbox"/>	COVID-19
<input type="checkbox"/>	Placenta accreta, increta, percreta	<input type="checkbox"/>	Pneumonia
<input type="checkbox"/>	Ruptured ectopic	<input type="checkbox"/>	Other infection (includes TB, meningitis, HIV, other)
<input type="checkbox"/>	Other (includes ruptured artery, liver laceration, unknown source of bleeding)	<input type="checkbox"/>	Specify:
<input type="checkbox"/>	Specify:	<input type="checkbox"/>	<b>Other cause of death, specify:</b>
<input type="checkbox"/>	<b>Thrombotic Pulmonary Embolism</b>	<input type="checkbox"/>	<b>Unable to determine</b>

1. Was the death pregnancy-related?
2. What was the underlying cause of death?

# Guiding Questions for Review Committees

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## CA-PAMR Committees only:

1. What were the **contributing factors** to the death?
  - Patient/family, provider, facility, system and community levels
  - **NEW in 2021: Did discrimination contribute? Did COVID pandemic contribute?**
2. What specific and feasible **actions** might have changed the course of events?
3. Was the death **preventable**? (Chance to alter the outcome)

# Contributing Factors and Recommendations

- ▶ Healthcare Provider
- ▶ Healthcare Facility
- ▶ System
- ▶ Community
- ▶ Patient

<b>DESCRIBE CONTRIBUTING FACTOR</b>
<b>PROVIDE RECOMMENDATION</b>
<b>IDENTIFY TARGET FOR RECOMMENDATION</b> [Patient/family, Provider, Facility, System, Community]

PATIENT FACTORS	HEALTHCARE FACILITY FACTORS <i>(Including nursing/other hospital staff)</i>	COMMUNITY FACTORS
<b>SOCIAL/ECONOMIC FACTORS</b>		
Lack of social support / Isolation		
Financial hardship	Lack of standardized policies or procedures	
Unstable housing		
<b>HEALTH FACTORS</b>	Lack of clinical skill / quality of care	
Mental health conditions		
Chronic disease		
Substance use disorder (heavy alcohol/ marijuana, illicit/prescription drug abuse)		
Tobacco use		
Sexual abuse / trauma (child or adult)		
Exposure to violence / intimate partner violence		
<b>INTERACTION WITH THE HEALTHCARE SYSTEM</b>		
Delayed or no care		
Non-adherence to medical recommendations		
Lack of knowledge / health literacy		
Cultural/religious or language barriers		
Other		

# CA-PAMR Considerations

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Preventability – the context is important

- Cause of death
- Timing of death
- Medical / Pregnancy-related deaths
- Injury deaths (suicide, homicide, drug overdose, other injury)

Labor, time and emotionally intensive



# Specific and Actionable Recommendations

\_\_\_\_\_ should \_\_\_\_\_ .  
 (who?) (do what?) (when?)

## The MD/RN should have given meds sooner (30 min)

**WHO** is the entity/agency who would have been/be responsible for the intervention?\*

**WHAT** is the intervention and **WHERE** is the intervention point?\*

- Patient/Family
- Provider
- Facility
- System
- Community

**WHEN** is the proposed intervention point?

- Among women of reproductive age (“preconception”)
- In pregnancy and in the postpartum period
  - Labor & Delivery (L&D)
  - Prior to L&D hospitalization discharge
  - First 6 weeks postpartum
  - 42-365 days postpartum

# Maternal Mortality Review Data to Action

Partnering with the  
California Maternal Quality Care Collaborative (CMQCC)

# CMQCC Partnerships

## State Agencies

- CA Department of Public Health, MCAH
- Regional Perinatal Programs of California (RPPC)
- DHCS: Medi-Cal
- Office of Vital Records
- CA Department of Health Care Access and Information (HCAI), *formerly Office of Statewide Health Planning and Development (OSHPD)*
- Covered California

## Membership Associations

- Hospital Quality Institute (HQI)/ California Hospital Association (CHA)
- Pacific Business Group on Health (PBGH)
- Integrated Healthcare Association (IHA)

## Key Medical and Nursing Leaders

- UC, Kaiser (N&S), Sutter, Sharp, Dignity Health, Scripps, Providence, Public hospitals

## Professional Groups (California sections of national organizations)

- American College of Obstetrics and Gynecology (ACOG)
- Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN)
- American College of Nurse Midwives (ACNM)
- American Academy of Family Physicians (AAFP)

## Public and Consumer Groups

- Consumers’ Union
- March of Dimes (MOD)
- California HealthCare Foundation (CHCF)
- Cal Hospital Compare
- Amniotic Fluid Embolism Foundation

## Health Plans

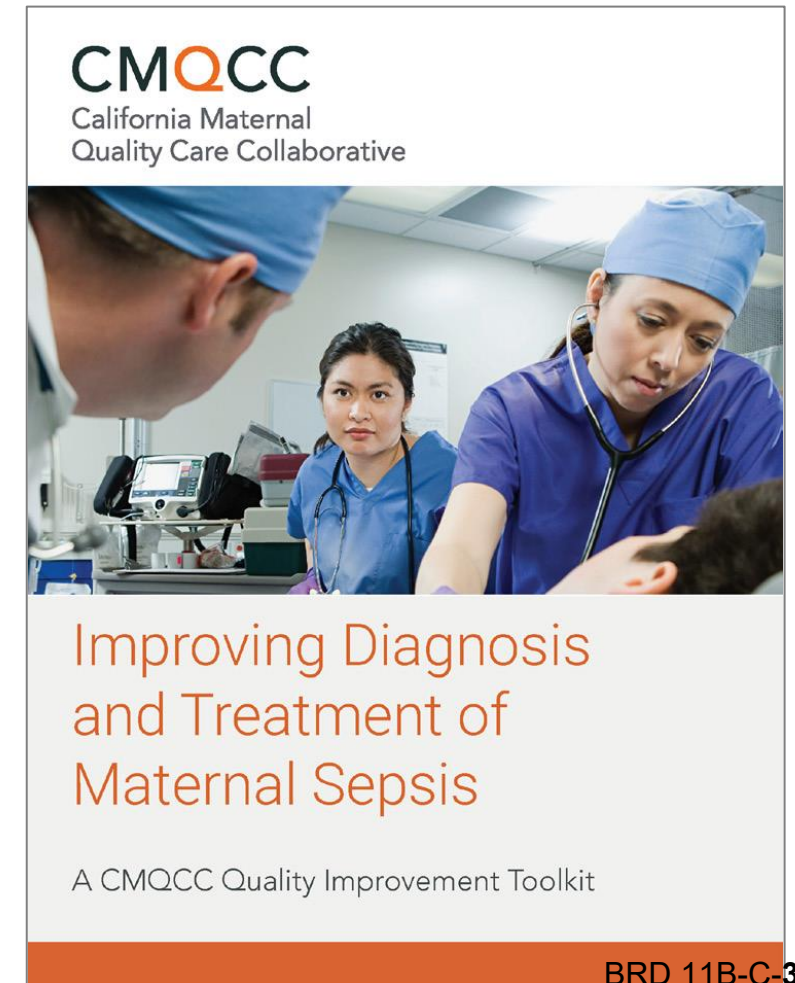
- Commercial and Managed Medi-Cal Plans



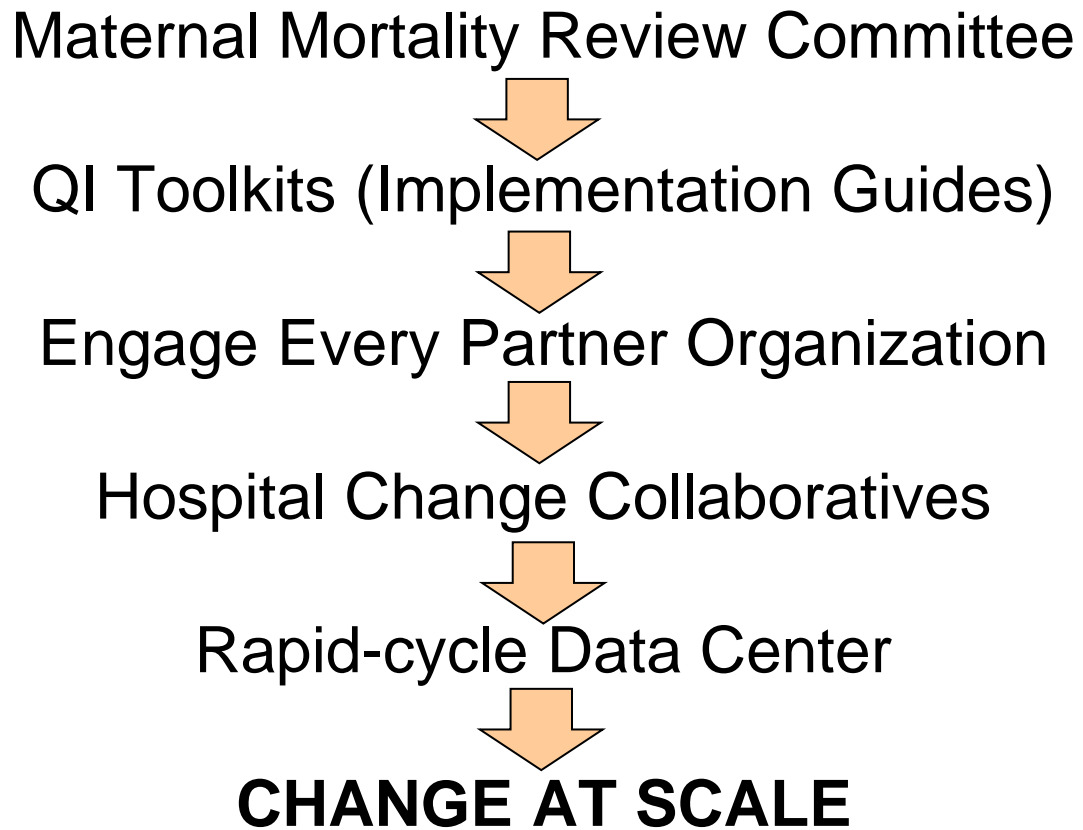
# CMQCC Quality Improvement Toolkits

Comprehensive and detailed “how to” guides for improving and redesigning hospital care for specific OB conditions

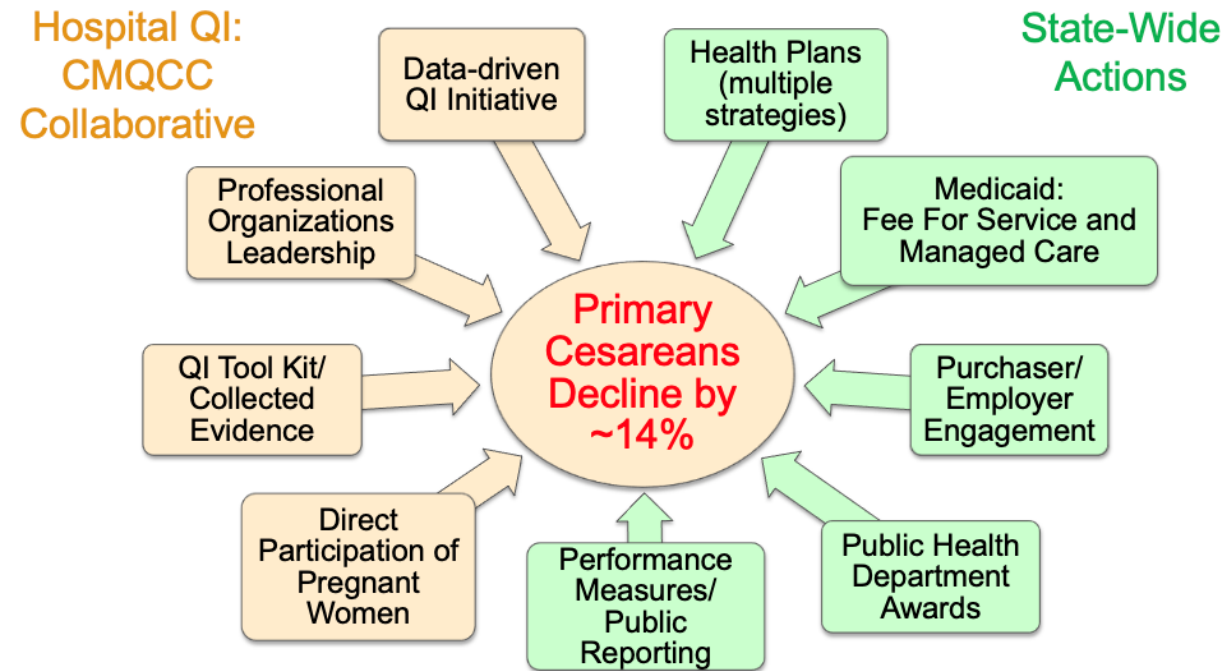
- Improving Health Care Response to Obstetric Hemorrhage V2.0
- Improving Health Care Response to Preeclampsia
- Supporting Vaginal Birth and Reducing Primary Cesareans
- Improving Health Care Response to Cardiovascular Disease in Pregnancy and Postpartum
- Improving Health Care Response to Maternal Venous Thromboembolism
- The Mother and Baby Substance Exposure Toolkit
- Improving Diagnosis and Treatment of Maternal Sepsis
- Elimination of Non-Medically Indicated Deliveries <39 Weeks



# Steps for Creating Change at Scale



## State-wide Initiative Activities



Collaborative Action : Collective Impact  
BRD 11B-C-34

# Birth Equity Initiative

- Move beyond Implicit Bias training
- Formal commitments for equitable care: dignity, respect, shared decisions
- Address microaggressions
- Connect community and hospital
- Stratify all hospital outcomes by race and ethnicity



# Community Birth Partnership

## Key elements

- Launch and market new supplemental NTSV toolkit chapters
- Focus on integration of equity and disparities work into the Supporting Vaginal Birth efforts
- Engage doulas and midwives to be part of the solution
- Identify best practices for integrating doulas and midwives into hospital care
- Improve the promotion and implementation of out-of-hospital transfer tools

TO KEEP BABY AND YOU SAFE FROM PREECLAMPSIA

# Let's Do Aspirin!




**What is preeclampsia?**  
Preeclampsia is a serious disease during pregnancy where high blood pressure and other complications can put baby and you at risk.

**How can I prevent preeclampsia?**  
Low-dose aspirin, as recommended by your healthcare provider, is the only known effective solution to prevent preeclampsia.

**How can low-dose aspirin keep baby safe?**  
Studies have shown that taking low-dose aspirin during pregnancy may help reduce your risk for serious problems, like preeclampsia and premature birth.

Ask your healthcare provider, "Am I at risk for preeclampsia?"

#LETSDOASPIRIN

Scan the QR Code to access the **MARCH OF DIMES** Health Action Sheet to prevent preeclampsia and premature birth.

# Prevent Preeclampsia with Low-Dose Aspirin

Am I at risk for preeclampsia?

Ask your healthcare provider if aspirin is right for you.



#LETSDOASPIRIN




California Maternal Quality Care Collaborative

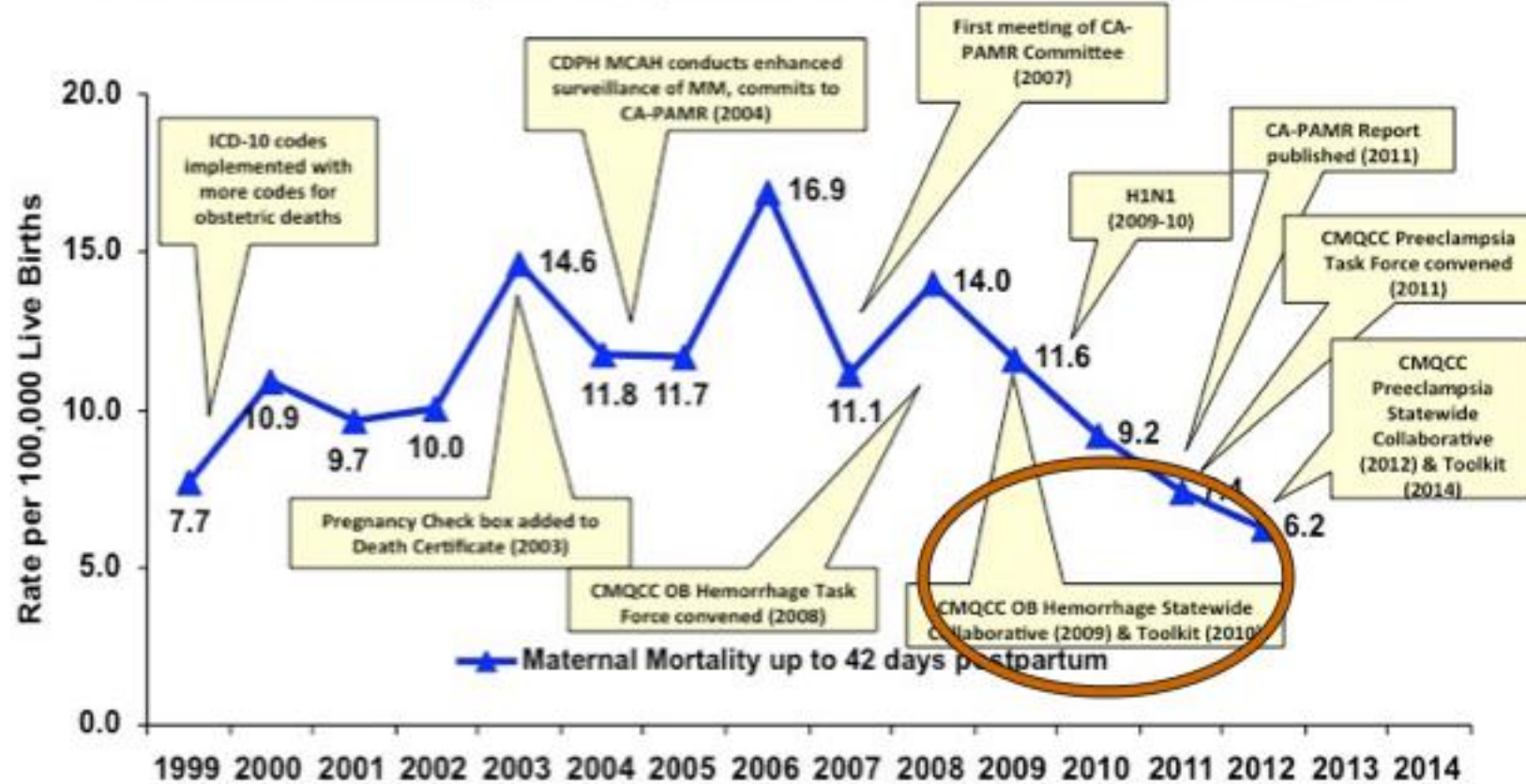


For more information, scan the QR Code with the camera on your smart phone.

## LDA Campaign Patient Education Materials

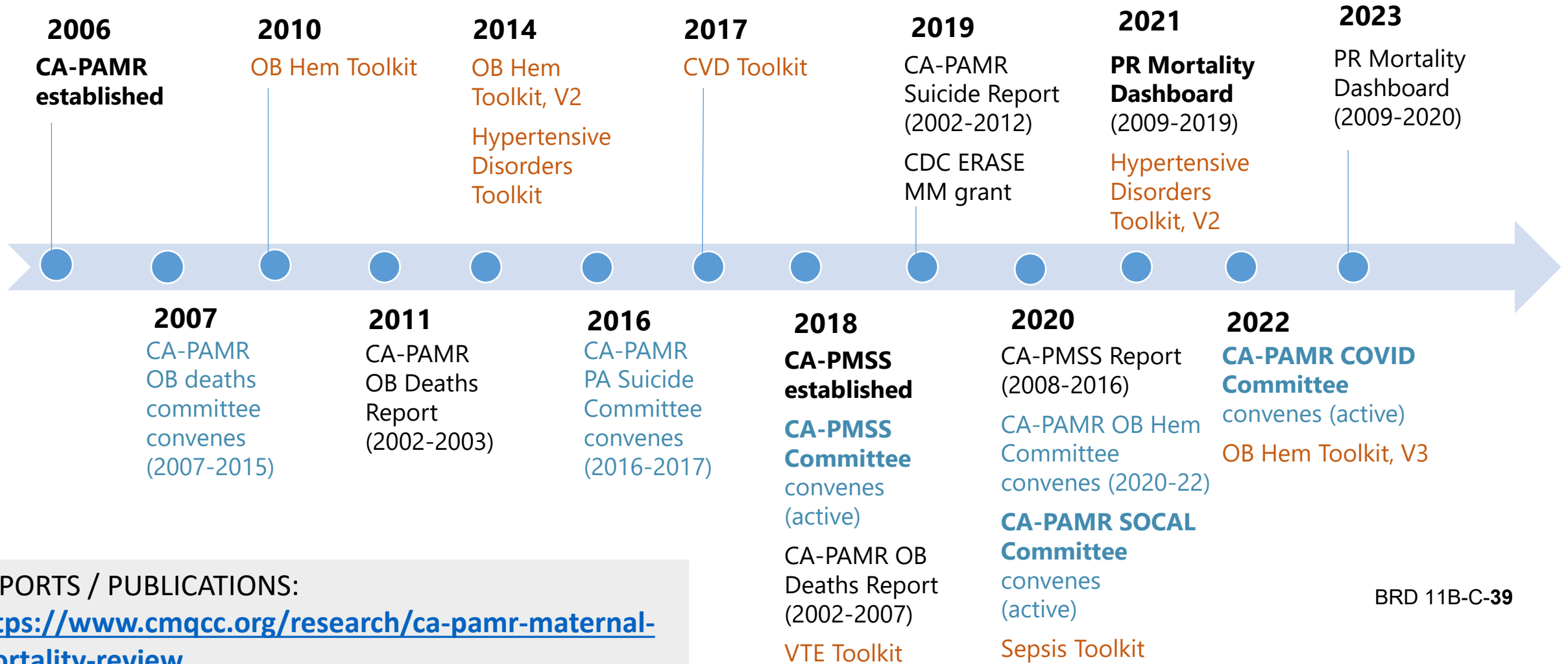
## Timeline of Activities

### Maternal Mortality Rates, California Residents: 1999-2012



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2012. Maternal mortality (deaths ≤ 42 days postpartum) calculated using ICD-10 codes A34, O00-O95, O98-O99. Pregnancy-related mortality (deaths from obstetric causes any time postpartum) calculated using ICD-10 classification (O00-O-99).

# California Maternal Mortality Review Milestones



REPORTS / PUBLICATIONS:

<https://www.cmqcc.org/research/ca-pamr-maternal-mortality-review>

# Maternal Health Promotion: Programs and Services

Karen Ramstrom, DO, MSPH





# MCAH Division: Maternal Health Programs and Initiatives

## Infrastructure and Capacity Building







- Local Maternal, Child, and Adolescent Health Program
- Regional Perinatal Programs of California
- Nutrition, Physical Activity, and Breastfeeding Initiatives
- Preconception Health Initiative
- Gestational Diabetes and Postpartum Care Initiative
- Fetal Infant Mortality Review (FIMR)
- Future: Mental and Behavioral Health Initiative

## Programs and Services for Specific Populations

- Adolescent Sexual Health Education Program
- California Home Visiting Program
- Adolescent Family Life Program

- Black Infant Health Program
- Perinatal Equity Initiative

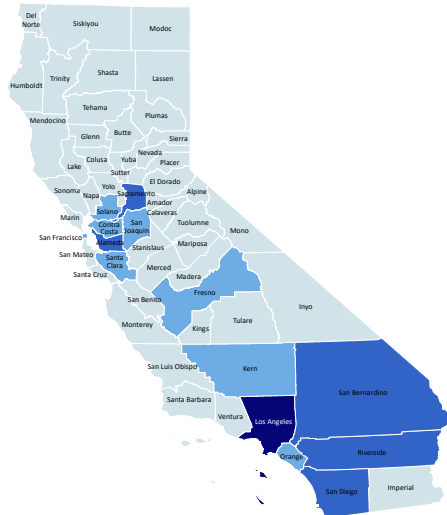
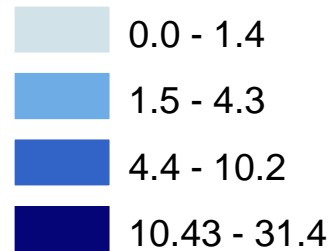
The Key Components of Preconception Health

 <p><b>Healthy Body</b></p> <p>Healthy eating and active living are essential to maintaining a healthy body. Eating well can help you feel better both physically and mentally, and give you the nourishment you need to boost your energy throughout the day...</p> <p><a href="#">Learn More</a></p>	 <p><b>Healthy Mind</b></p> <p>Having a healthy mind is key to your overall health and well-being. A healthy mind includes emotional, psychological and social well-being and affects how you think, feel and act...</p> <p><a href="#">Learn More</a></p>	 <p><b>Healthy Environment</b></p> <p>Where you live, learn, work and play all contribute to your overall health. Access to safe drinking water, safe parks and pathways for walking or biking, open green spaces...</p> <p><a href="#">Learn More</a></p>
 <p><b>Planning Ahead</b></p> <p>Being prepared for what life has for you is all about the way you plan for your future. You have control over many aspects of your life. Living a healthy, active lifestyle and planning for life changes is all within your control...</p>	 <p><b>Healthy Relationships</b></p> <p>There are many different kinds of relationships. You may have relationships with many people: friends, family, boyfriends/girlfriends, partners or a spouse...</p>	 <p><b>Access to Care</b></p> <p>Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans...</p>

[www.cdph.ca.gov/MCAH](http://www.cdph.ca.gov/MCAH)

# MCAH Programs supporting Black Perinatal Health

## Percentage of Total Black Birthing Persons in California



## Black Infant Health Program (BIH)

- BIH group model and life planning serves: Black women who are 16 years or older, pregnant or up to six months postpartum at the time of enrollment **regardless of income.**
- BIH participants report:
  - Better understanding of effective strategies to manage and address stress
  - Stronger positive connections to their heritage and the Black women in their community
  - Increased empowerment to make behavior changes that lead to a healthier life

## Perinatal Equity Initiative (PEI)

- PEI serves: BIH communities in need of additional supports including doula services, group prenatal care, fatherhood/partner services, pre-/inter-conception care, midwifery capacity building, and provider and health system engagement on implicit bias
- PEI outcomes being tracked include:
  - Number of Black women with full-term pregnancies
  - Fatherhood participation in the prenatal and postpartum experience
  - Access to mental health services
  - Doula involvement and relationship with medical personnel

# Other CDPH Programs that promote Maternal Health (not a complete list)

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- ▶ WIC
- ▶ Genetic Disease Screening Program
- ▶ STD Control Branch
- ▶ Immunization Branch
- ▶ Nutrition and Physical Activity Branch
- ▶ Substance and Addiction Prevention Branch
- ▶ Injury and Violence Prevention Branch
- ▶ Tobacco Control Program
- ▶ Office of Oral Health
- ▶ Office of Health Equity

Note that other Departments (e.g., Department of Social Services, Department of Health Care Services) also work to improve maternal health.

# How to reach us:

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