

RISING TO THE CHALLENGE:



The ACEs Life-Cycle: Creating Healthier Moms, Babies, and Communities

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California Surgeon General

2026 State of ACEs Regional Health Summit
October 1, 2026



Case Study

30yo G0

cc: infertility,
regular menses,
sexually active

Med Hx: obesity

ACE score: 7

CHILDHOOD TRAUMA
AND THE
BRAIN



ACEs And Gynecologic Conditions

ACE-induced chronic stress and resultant hormonal and immune imbalances are related to the observed associations

Medical Condition	OR*	Notes
Endometriosis (physical abuse)	1.2	Relative risk
Endometriosis (sexual abuse)	1.49	Relative risk
Hysterectomy	2.01	≥3 ACE
Bilateral oophorectomy	2.61	≥3 ACE
Medical Condition	OR**	Notes
Severe menopausal symptoms	4.51	
Chronic pelvic pain	3.14	

*Note: Odds Ratio (OR) of having condition compared to 0 ACE, ≥4 ACE unless specified

**Note: Odds Ratio (OR) of risk of ≥4 ACE when condition is present, compared to controls where condition is not present

Demakakos P, Steptoe A, Mishra GD. Adverse childhood experiences are associated with increased risk of hysterectomy and bilateral oophorectomy: A national retrospective cohort study of women in England. BJOG: Int J Obstet Gy. 2022;129:1481–1489.

ACEs and Reproductive Health

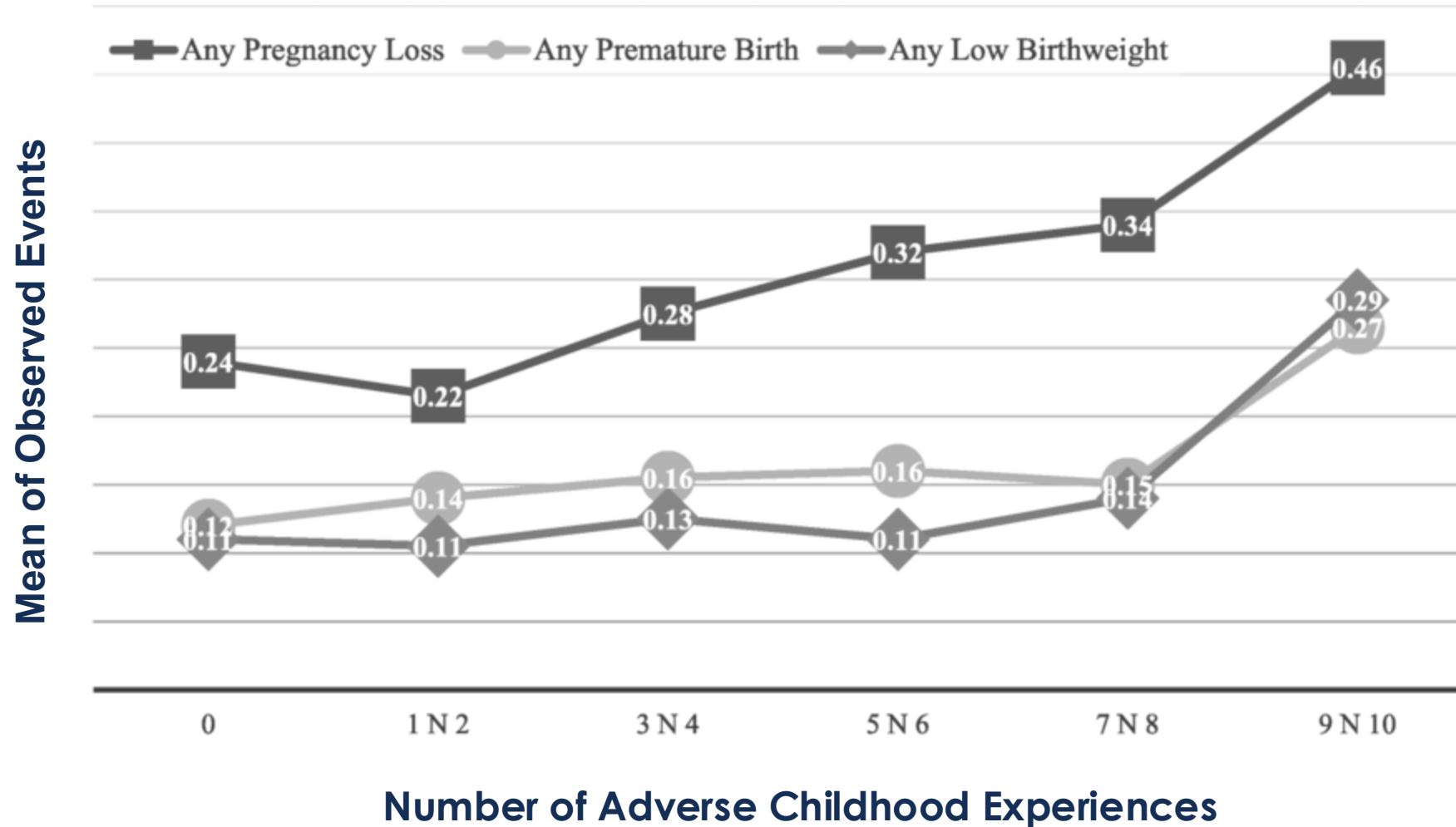
Condition	Odds Ratios*
Unintended pregnancy	2.6 (≥ 5 ACEs)
Teen pregnancy	4.2
Teen paternity	2.6 (≥ 5 ACEs)
Sexually transmitted infections (lifetime)	5.9
Violence victimization (intimate partner violence, sexual assault)	7.5
Probable postpartum depression risk	4.5 (≥ 5 ACE)
Use of illicit substances during pregnancy	6.1
Hypertensive disorders of pregnancy	2.0
Severe menopausal symptoms	4.5**
Chronic pelvic pain	3.1**

*Odds Ratios for ≥ 4 ACEs (relative to no ACEs) unless otherwise specified

**Odds Ratio (OR) of risk of ≥ 4 ACE when condition is present, compared to controls where condition is not present

Anda, 2002; Hills, 2004; Hughes 2017; Young-Wolff, 2021; Alcala 2018; Hargreaves 2019; Angurud 2018; Atzl 2019; Chung 2010; Mersky 2019; Miller 2021; Petruccelli 2019); Demakakos 2022; Harris 2018; Kapoor 2021; Krantz 2019

ACES AND PERINATAL OUTCOMES



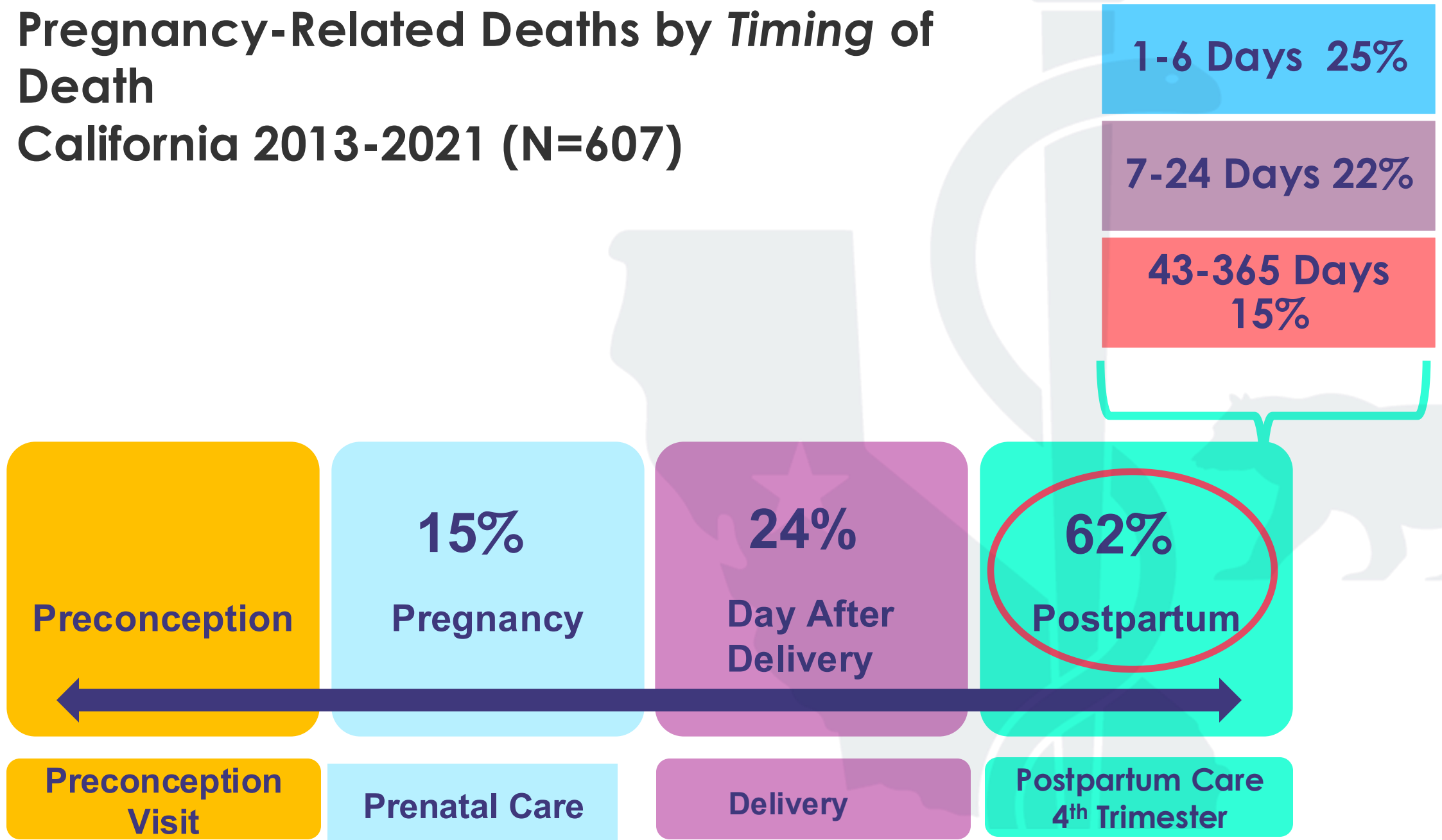
Mersky, J.P., Lee, C.P. Adverse childhood experiences and poor birth outcomes in a diverse, low-income sample. *BMC Pregnancy Childbirth* **19**, 387 (2019). <https://doi.org/10.1186/s12884-019-2560-8>



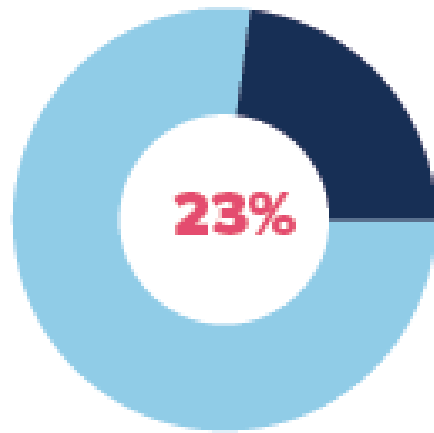
**In California,
every five days,
a mother loses her
life to pregnancy-
related
complications**

Pregnancy-Related Deaths by *Timing* of Death

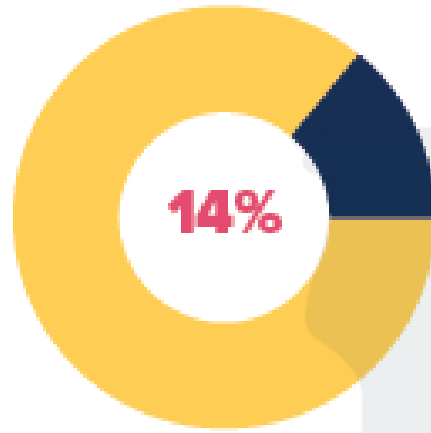
California 2013-2021 (N=607)



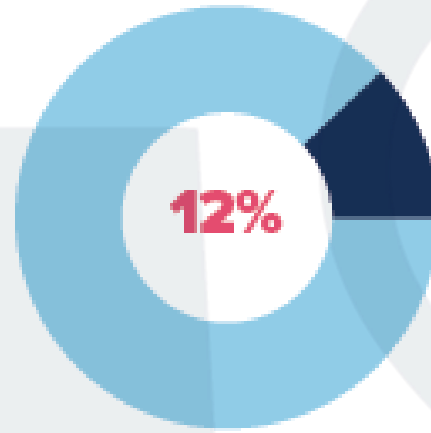
Pregnancy-Related Causes of Death California 2013-2021



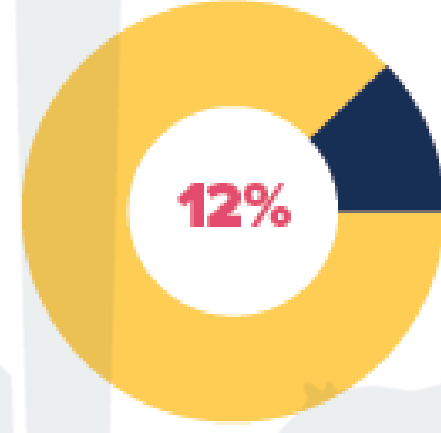
**Heart
Disease**



Bleeding



**Behavioral
Health**



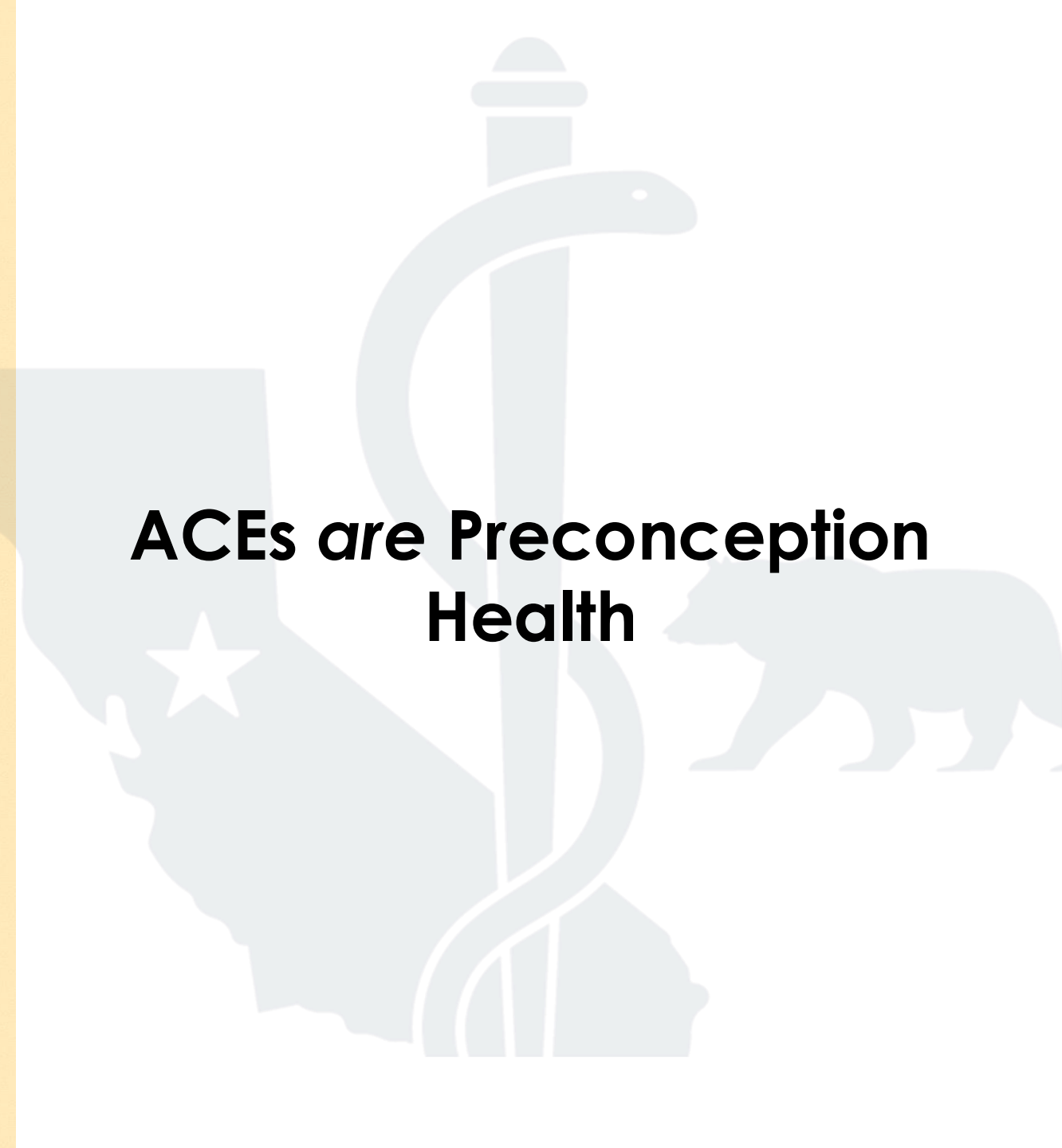
Infection

**Over 80% of California Maternal
Deaths are *Preventable***



HIGH ACE SCORES

- Higher unintended pregnancy
- Risks of hypertension, preterm birth and postpartum depression
- Newborns carry biological imprints of stress exposure



ACEs are Preconception Health

ACE'S Questionnaire in Prenatal Care Kaiser Permanente

Women's Health Screening Questionnaire

Thank you for completing this questionnaire. Your answers will help us provide you with excellent care.

Prior to your 18th birthday:	
Did a parent or adult in your home ever swear at you, insult you, or put you down?	1 ☐ Yes 0 ☐ No
Not including spanking, did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?	1 ☐ Yes 0 ☐ No
Did you experience sexual abuse by an adult or person at least 5 years older?	1 ☐ Yes 0 ☐ No
Did you lose a parent through divorce, abandonment, death, or other reason?	1 ☐ Yes 0 ☐ No
Did your parents or adults in your home ever hit, punch, or beat each other up?	1 ☐ Yes 0 ☐ No
Did you live with anyone who was a problem drinker, alcoholic, or who used street drugs?	1 ☐ Yes 0 ☐ No
Did you have someone in your household who was depressed, mentally ill, or attempted suicide?	1 ☐ Yes 0 ☐ No
Did you have a member of your household who went to prison?	1 ☐ Yes 0 ☐ No
Total Yes responses _____	

Thinking About Your Health?



Your health and well-being are important. Let's make sure you are strong and ready, so when you decide to get pregnant, you'll feel your best.

Take the PreMA (Preconception Medical Assessment) Quiz

- 1 Were you born with a heart problem, or do you currently have a heart problem that needs medical attention?
☐ yes ☐ no
- 2 Have you ever been told that your heart is not working well, or do you have a heart problem?
☐ yes ☐ no
- 3 Has a doctor told you that you have high blood pressure?
☐ yes ☐ no
- 4 Has a doctor told you that you have diabetes?
☐ yes ☐ no
- 5 Have you ever been diagnosed with a lung disease, or do you have a history of breathing problems?
☐ yes ☐ no
- 6 Do you take any medicine that was not prescribed to you by a doctor, like illegal drugs or prescription medicine for reasons other than your health?
☐ yes ☐ no
- 7 Have you ever had a surgery on your stomach or intestines, or do you have a problem with your digestive system?
☐ yes ☐ no
- 8 Have you ever been in the hospital or needed treatment because you drank too much alcohol?
☐ yes ☐ no

Tips for Everyone

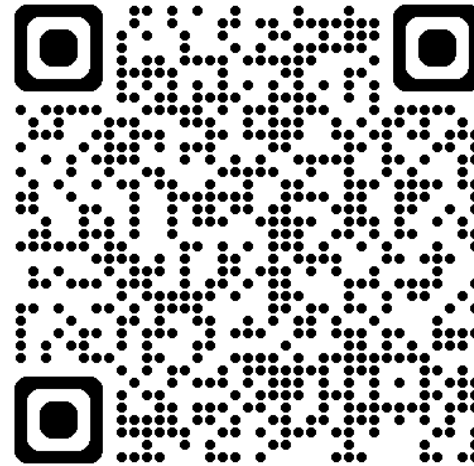
- Get a preconception visit to review overall health and existing medical conditions.
- Review medications, including over-the counter and herbal supplements.
- Family planning can give you extra time to get healthy before pregnancy.
- Go to all your prenatal and postpartum visits.
- In partnership with your medical provider, create a pregnancy plan for a healthy pregnancy and a healthy baby.

Always remember to trust your body. If you do not feel right, seek care right away.

4+ yes. For the healthiest baby, your health requires closer and more attention before and during pregnancy. You may have chronic health conditions that require extra attention in pregnancy. See a health care provider at least 6 months prior to trying to become pregnant. You may need more tests, new medications or to see a specialist before and during pregnancy. During delivery you may need extra medical attention.

1-3 yes. For the healthiest baby, your health will probably require more attention before pregnancy. See a health care provider at least 3 months before trying to become pregnant and create a pregnancy plan. You may need more tests, new medications or see a specialist before and during pregnancy.

0 yes. For the healthiest baby, follow the Tips for Everyone suggested above.



PremaCA.org

Simple
8 question quiz

Health Awareness
Before
Pregnancy

Conversation
starter

Scan the QR code and get started by talking to your health care provider today.



Find resources at **CA.gov**
or **osg.ca.gov/resources**



PreMA: An Upstream Approach to Health

PRECONCEPTION MEDICAL ASSESSMENT

Healthy starts before pregnancy.

PreMA helps you plan ahead for a healthier pregnancy, a healthier child, and a healthier life.

UPSTREAM: ACT TODAY

A small step now leads to a healthier future.

DOWNSTREAM: LASTING IMPACT



PreMA

Preconception
Medical Assessment



ASSESS

Know Your Health.
Identify Risks.



OPTIMIZE

Improve Health.
Manage Conditions.



PLAN

Personalize
Preconception Care.



PREPARE

Feel Ready.
Start Strong.



Healthier
Pregnancy



Healthier
Child



Lower Risk of
Chronic Disease



Healthier Life
& Future Generations



KEY TAKEAWAY

PreMA invests in health before pregnancy
and creates benefits that **last a lifetime.**



POSTER SESSION IV FRIDAY, FEBRUARY 10, 2023 • 3:30 PM - 5:00 PM |

VOLUME 228, ISSUE 1, SUPPLEMENT , S663, JANUARY 2023



PDF [575 KB]

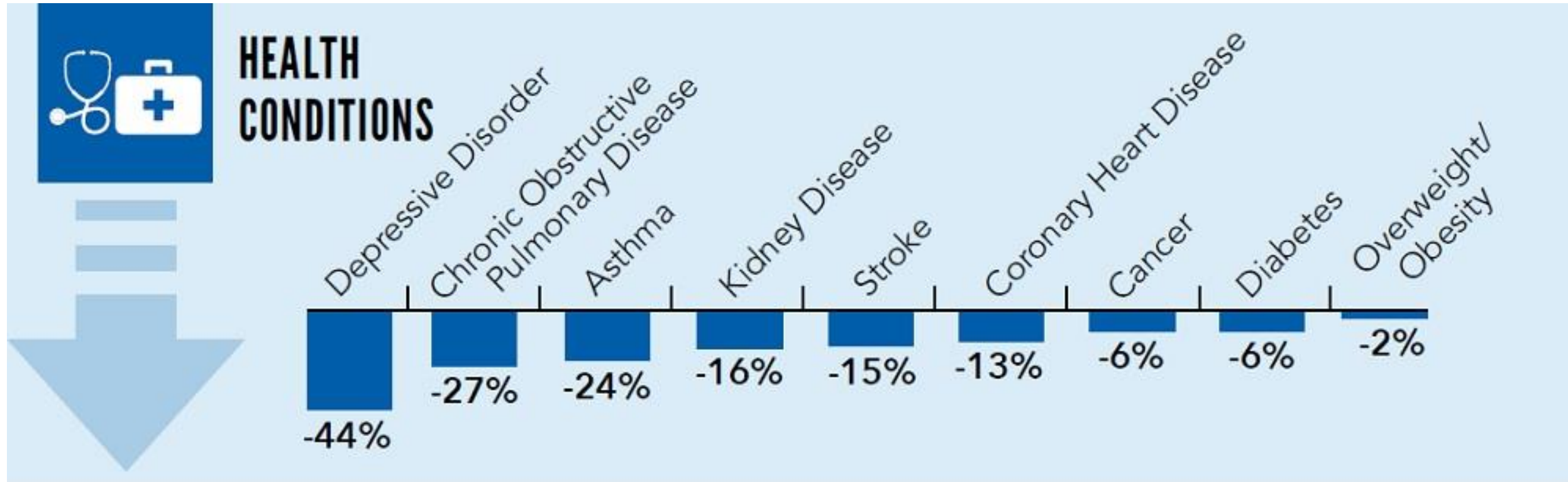
The impact of maternal ACEs on obstetric outcomes and psychosocial wellbeing during pregnancy

Jesica Britt • Moonseong Heo • Lauren S. Keenan-Devlin • Ann Borders • Liwei Chen • Amy Crockett

DOI: <https://doi.org/10.1016/j.ajog.2022.11.1113> • Check for updates

Higher ACE scores were associated with maternal morbidity, NICU admission ,and psychosocial stress during pregnancy.

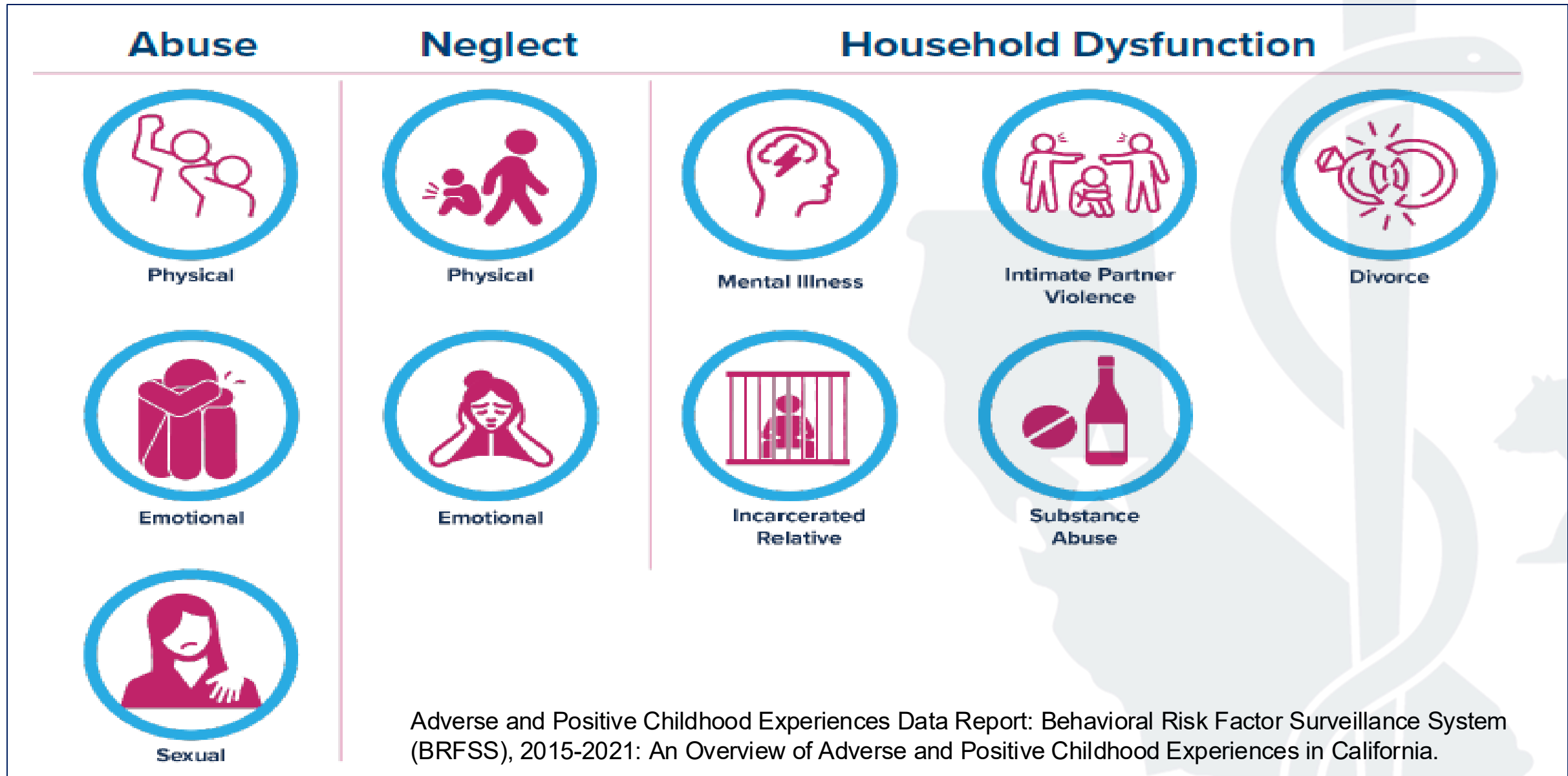
ADDRESSING ACES IN CHILDHOOD CAN POTENTIALLY DECREASE



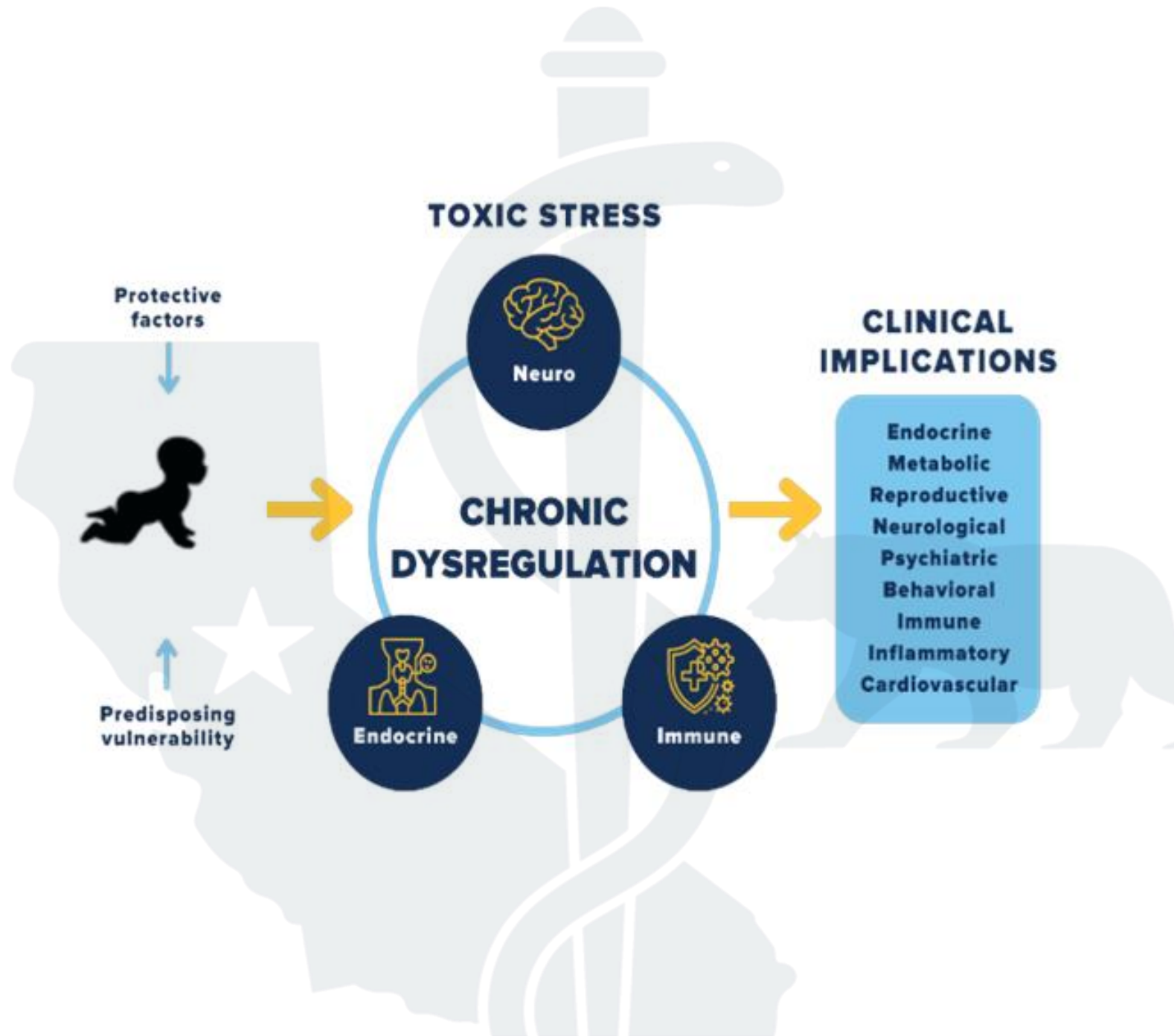
ADDRESSING ACES IN CHILDHOOD CAN POTENTIALLY DECREASE



Adverse Childhood Experiences (ACEs)







MATERNAL MENTAL HEALTH IS AN ACE

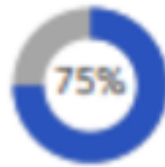


1 in 5 Mothers are Impacted by Mental Health Conditions

Most common complication of pregnancy and birth

>800,000 families annually affected

Most women are untreated, increasing risk and negative impacts



Greater Sacramento Region

15.5%

Prenatal Depression Symptoms 2020-2022

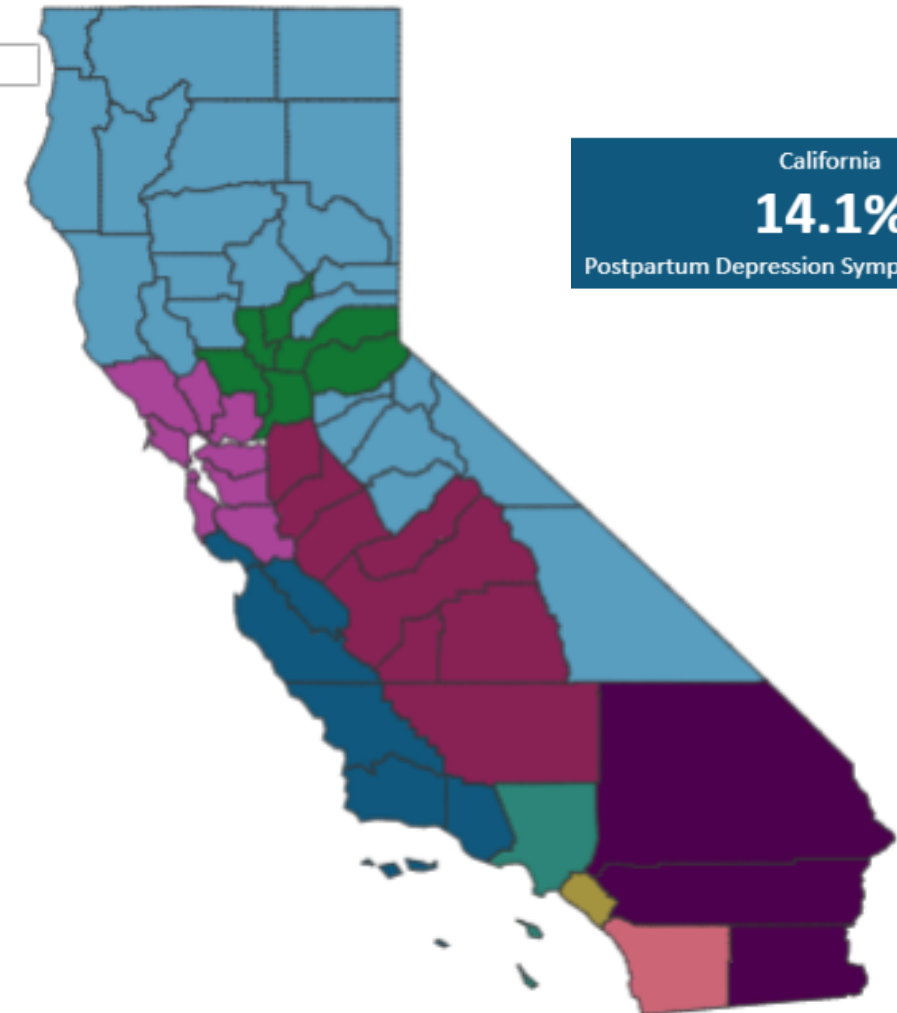
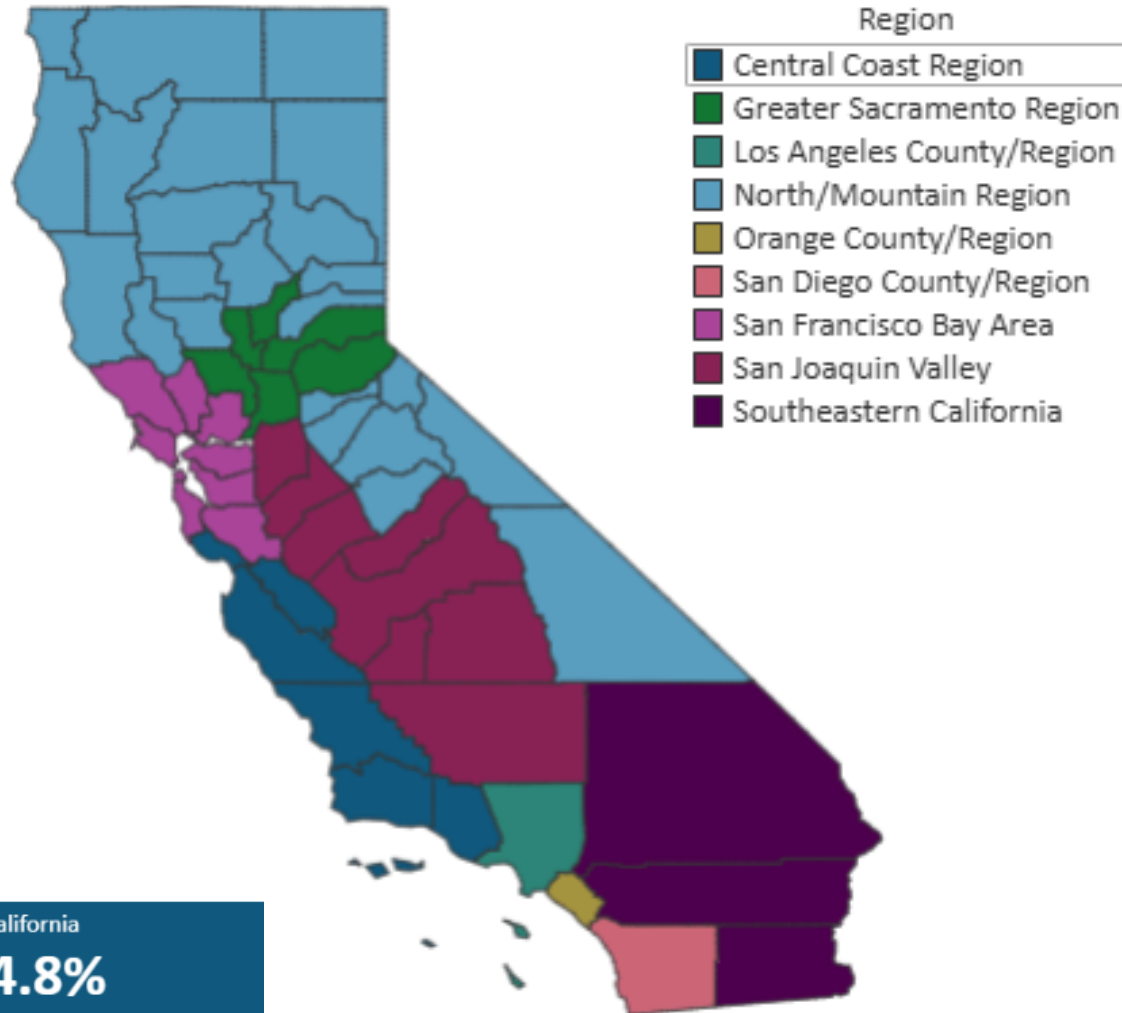
Greater Sacramento Region

14.1%

Postpartum Depression Symptoms 2020-2022

Prenatal Depression Symptoms

Postpartum Depression Symptoms



California

14.1%

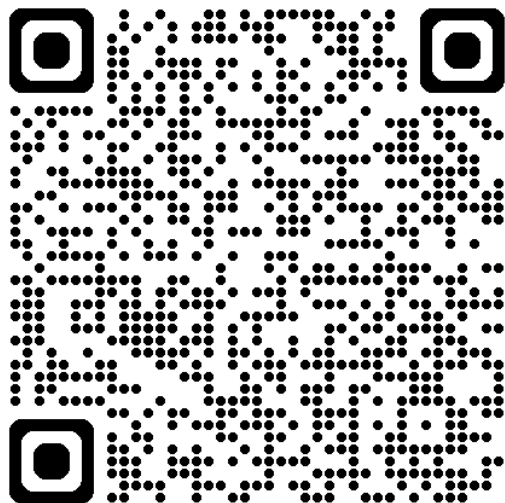
Postpartum Depression Symptoms 2020-2022

California

14.8%

Prenatal Depression Symptoms 2020-2022

What can be
done in the
community
and at home?



Support New Mom's Mental Health

1 IN 5 People in California experience
depression during & after pregnancy



Look for changes
in behavior



Listen for harmful
words



Provide words
of support



Direct to places
of support and care

**It's okay to have
the conversation.**



OFFICE OF THE
CALIFORNIA
SURGEON GENERAL

22

For more information



One Small Thing -community support



- 62% of maternal deaths occur **after** hospital discharge
- 42% of new moms **report** severe loneliness/isolation
- **Loneliness** is the strongest non-medical predictor of postpartum depression



Source: Kebede AA, Gessesse DN, Tsega NT, Aklil MB, Temesgan WZ, Abegaz MY, Anteneh TA, Tibebe NS, Alemu HN, Haile TT, Seyoum AT, Tiguh AE, Yismaw AE, Mihret MS, Nenko G, Wondie KY, Taye BT. Prevalence and factors associated with maternal loneliness during the postpartum period in Gondar city. Heliyon. 2022 Jul 8;8(7):e09891. doi: 10.1016/j.heliyon.2022.e09891. PMID: 35847616; PMCID: PMC9284384.

Transgenerational Trauma and Poor Mental Health

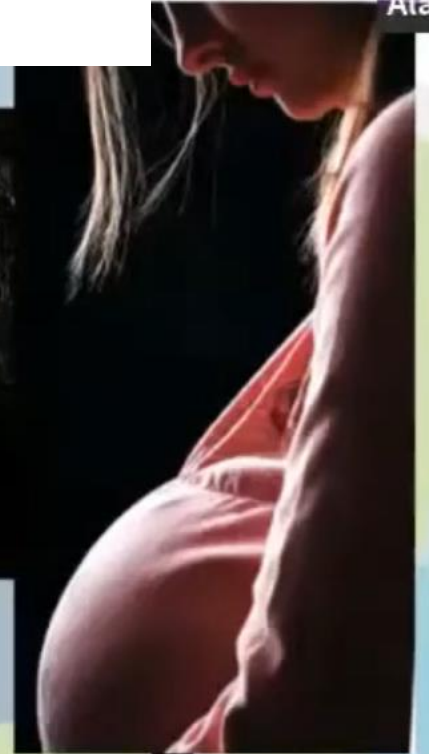
Generation 0
Childhood trauma
+
Maternal antenatal
depression

Generation 1
Childhood trauma
+
Maternal antenatal
depression

Generation 2
Childhood trauma
+
Maternal antenatal
depression

Generation 3
Childhood trauma
+
Maternal antenatal
depression

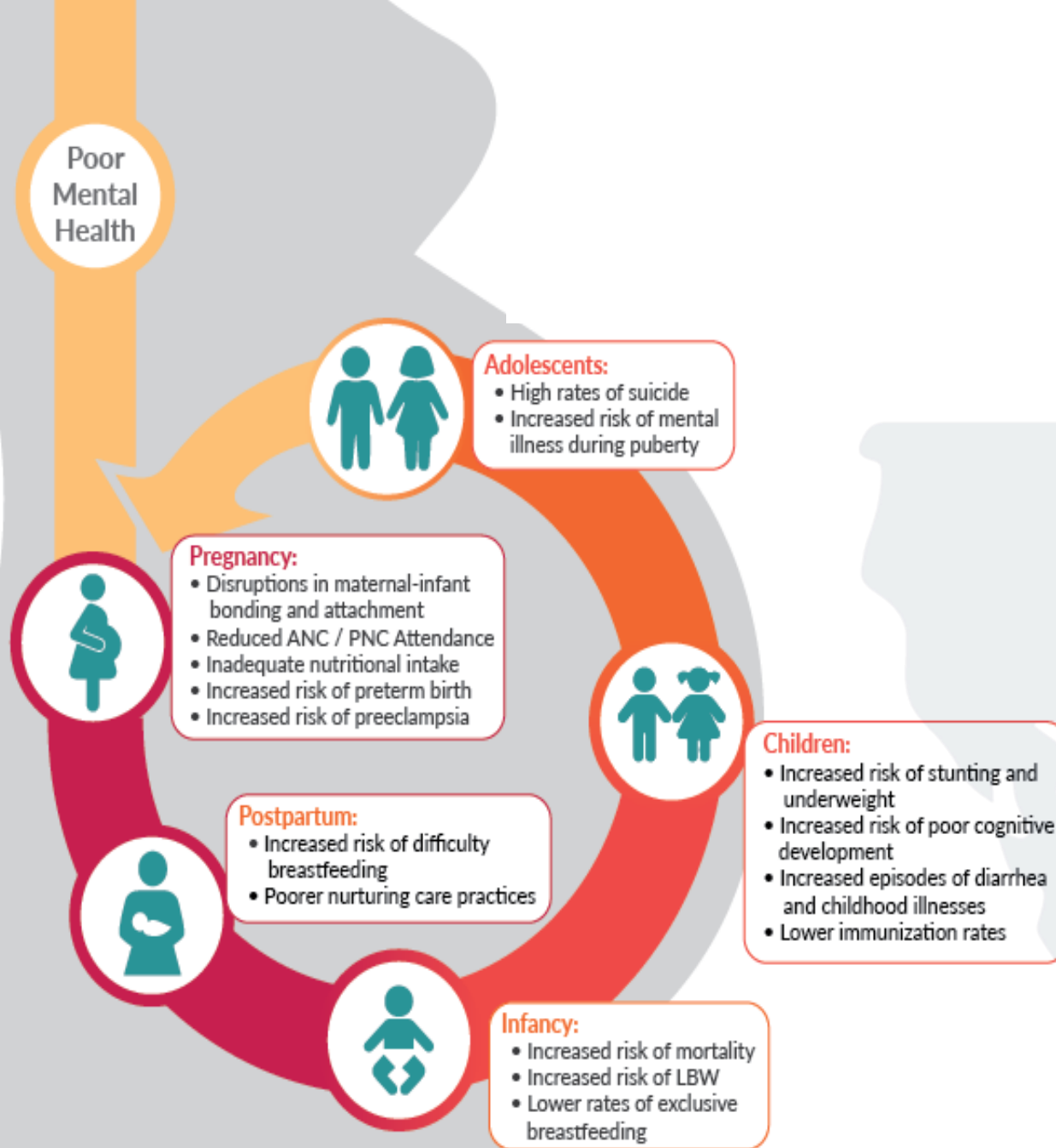
Generation 4
Childhood trauma
+
Maternal antenatal
depression



Alain G

Intergenerational Behaviors Crime and Incarceration

Childhood Trauma	Emotional Response	Reactive Behavior	Coping Pattern	Criminal Activity
Physical abuse	Anger	Physical aggression	Fighting with peers	Assault
Parent-child separation	Sadness, grief	Withdrawal	Substance abuse	Drug possession
Witness to violence	Anxiety	Hypervigilance	Gang activity	Accessory to homicide
Parental substance abuse	Anger	Verbal aggression	Asocial behavior (lying, stealing)	Fraud
Sexual molestation	Fear, anxiety	Sexualized behavior	Promiscuity	Prostitution



Impact of Maternal Depression: An Adverse Childhood Experience

Increased risk in child:
Depressive symptoms
Anxiety
Aggression
Hyperactivity
Temperament issues

McDonald SW, et al Maternal adverse childhood experiences, mental health, and child behavior at age 3: the all our families community cohort study. Prev Med. 2019;118:286–294.



Cardiovascular Disease

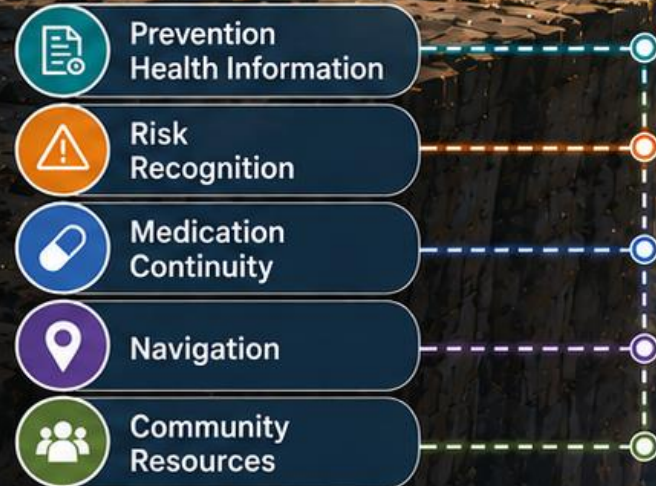
- No. 1 killer of women
- Claims more women's lives each year than ***all forms*** of **cancer combined**
- 80% of maternal deaths are preventable
- 63% increased risk *future* cardiovascular disease if had cardiovascular disease in pregnancy

BRIDGING THE GAP

IMPROVING HEART HEALTH FROM PREVENTION TO CARE ACROSS THE LIFE-COURSE.

Technology today. Better health tomorrow.

DISCONNECTED.
ISOLATED.
UNCERTAIN.



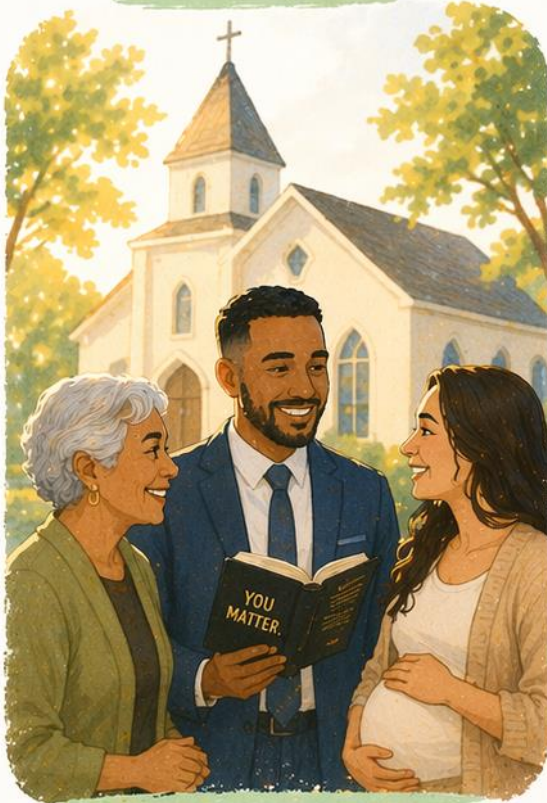
**COMMUNITY TRUST IS
A CRITICAL COMPONENT TO BETTER HEALTH.**
Stronger connections. Healthier lives.
Thriving communities.





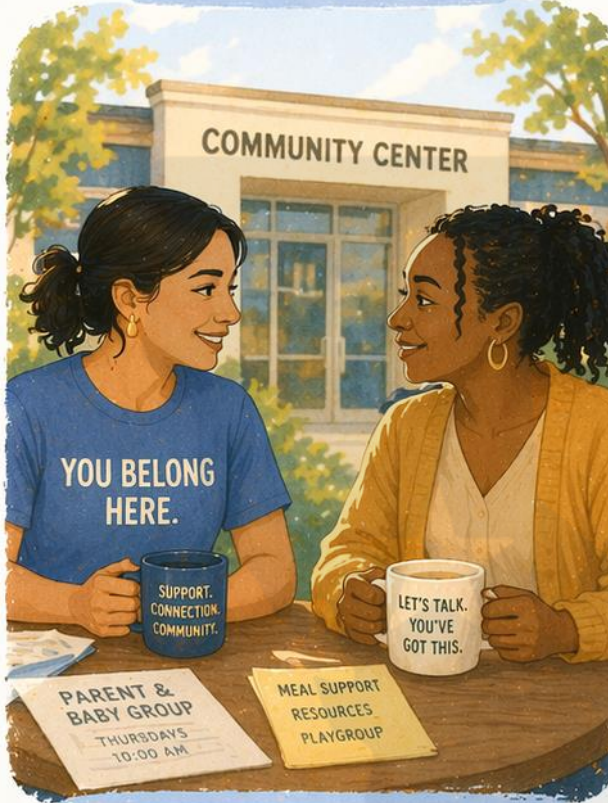
Trust Lives in the Community.

Church



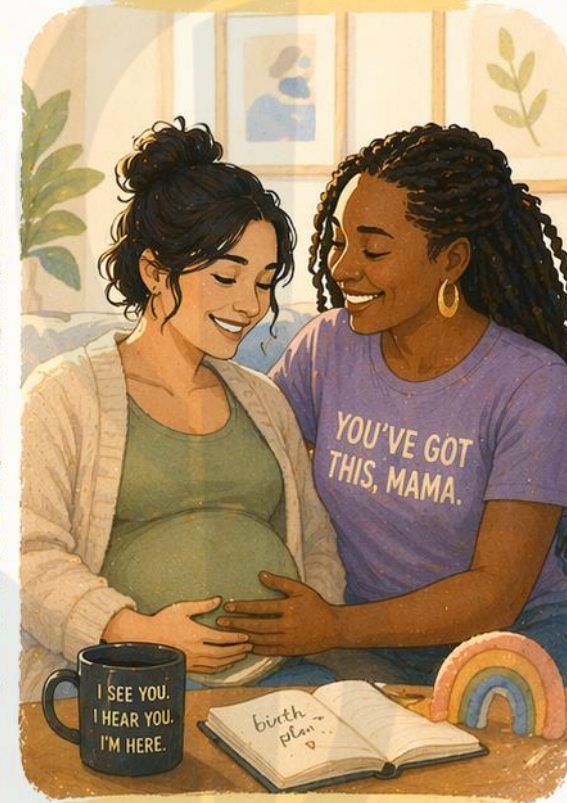
A Place of Faith.
A People Who Care.

Community Center



A Place to Connect.
Support You Can Count On.

Doula & Friends



A Trusted Guide.
A Friend Who Walks With You.

When we show up in trusted spaces,
people feel seen, heard, and respected.



***Improve the life of a mom
Improve the life of that baby
and the generations to come***



THANK YOU
OSGInfo@osg.ca.gov

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 @CaliforniaSurgeonGeneral
 @CA_OSG

