

## Definition: Pregnancy-Related Mortality Rate

### Pregnancy-Related Mortality Rate

Death from obstetric causes within one year postpartum, per 100,000 live births

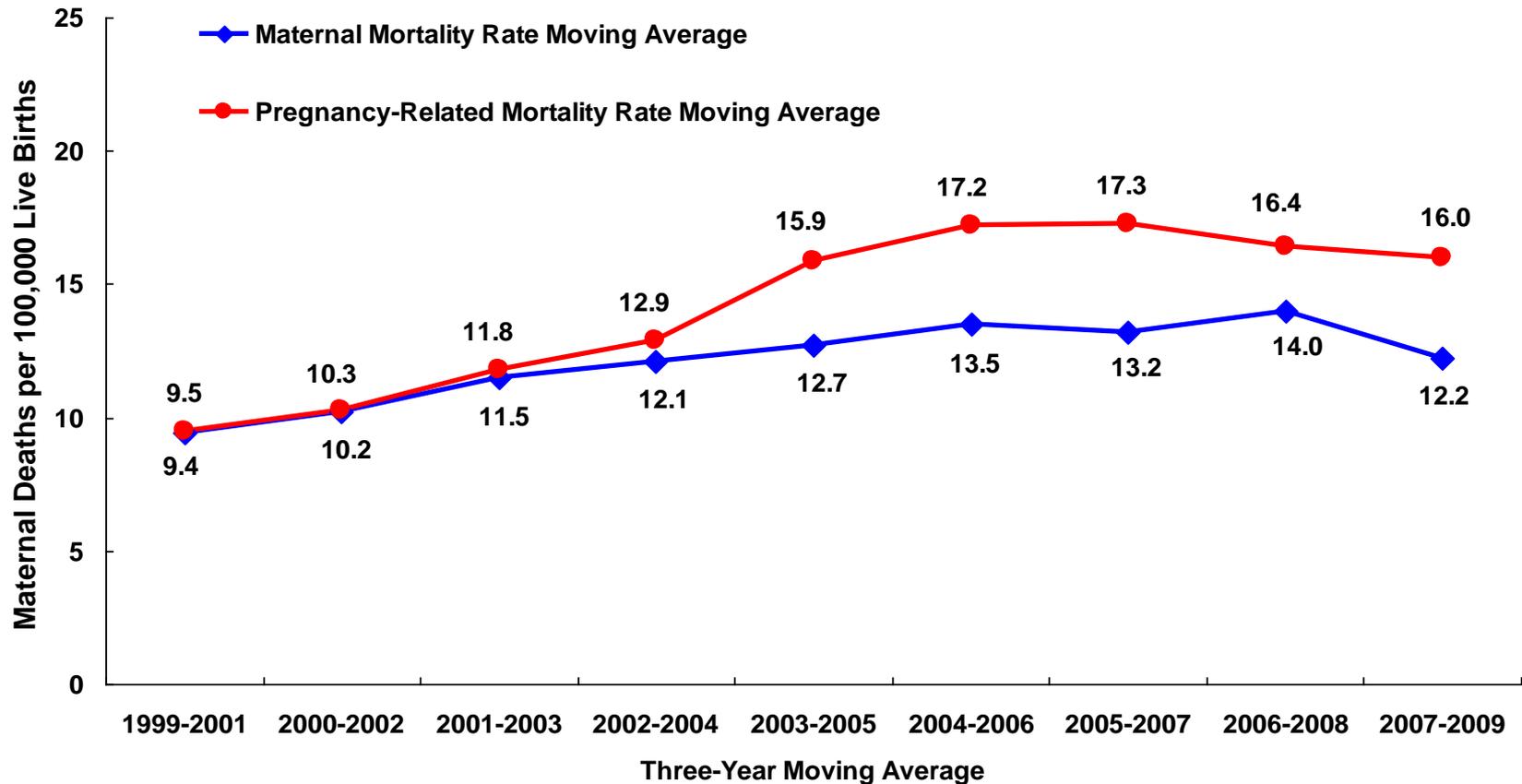
**Numerator:** The number of deaths with the underlying cause of death on the death certificate from the following ICD codes:  
ICD-10 codes A34, O00-O96, O98-O99 for 1999-present

**Denominator:** The number of live births in California, per year

- Suggested by the Centers for Disease Control and Prevention (CDC)\* and the American College of Obstetricians and Gynecologists (ACOG) to:
  - Monitor pregnancy-related deaths occurring 42-365 days postpartum in addition to the earlier (<42 days) maternal deaths
  - Be used as a starting point for review of pregnancy-related deaths in order to identify opportunities to reduce future deaths

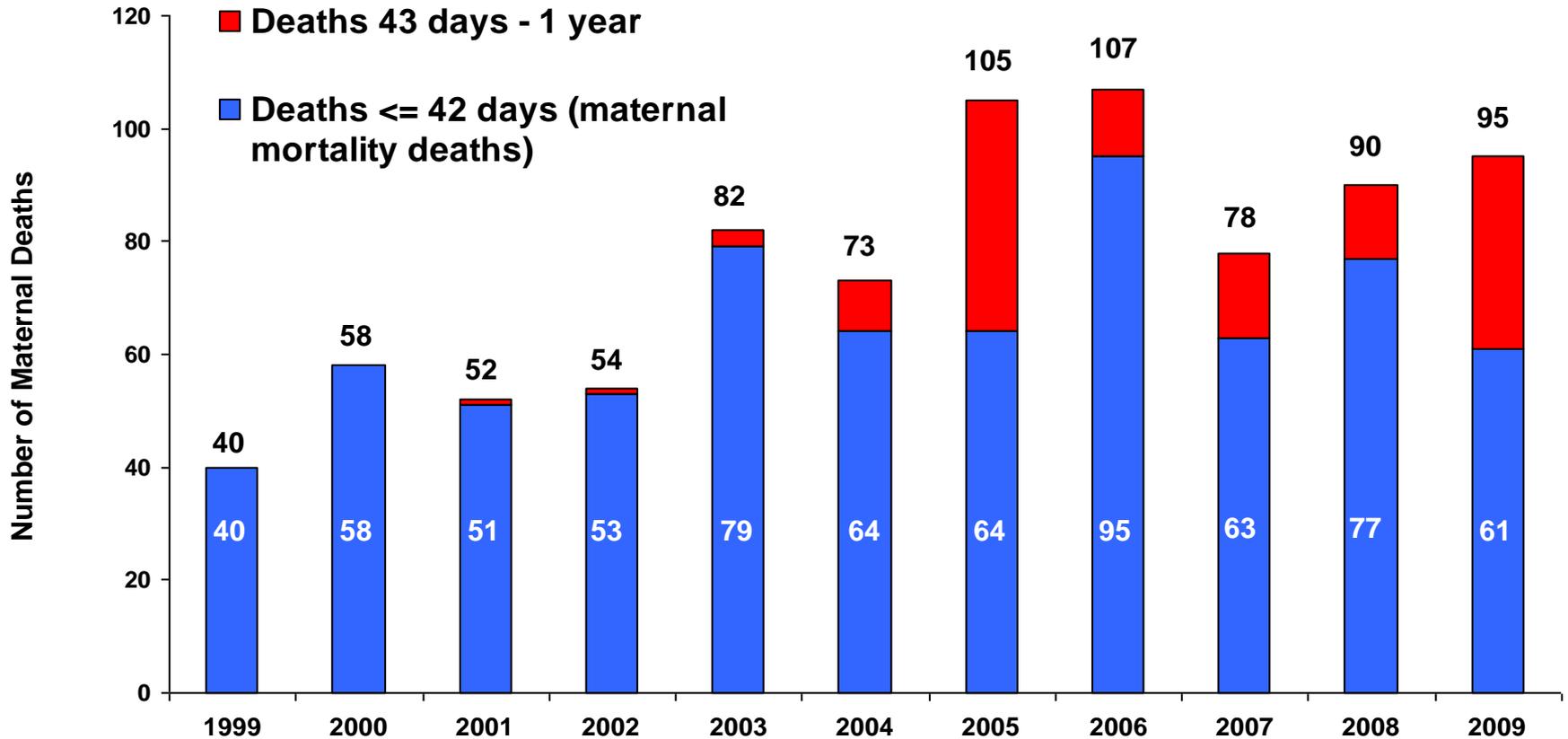
\*Berg C, Danel I, Atrash H, Zane S, Bartlett L (Editors). Strategies to reduce pregnancy-related deaths: from identification and review to action. Atlanta: Centers for Disease Control and Prevention; 2001.

# Moving Average of Maternal Mortality Rates and Pregnancy-Related Mortality Rates, California Residents; 1999-2009



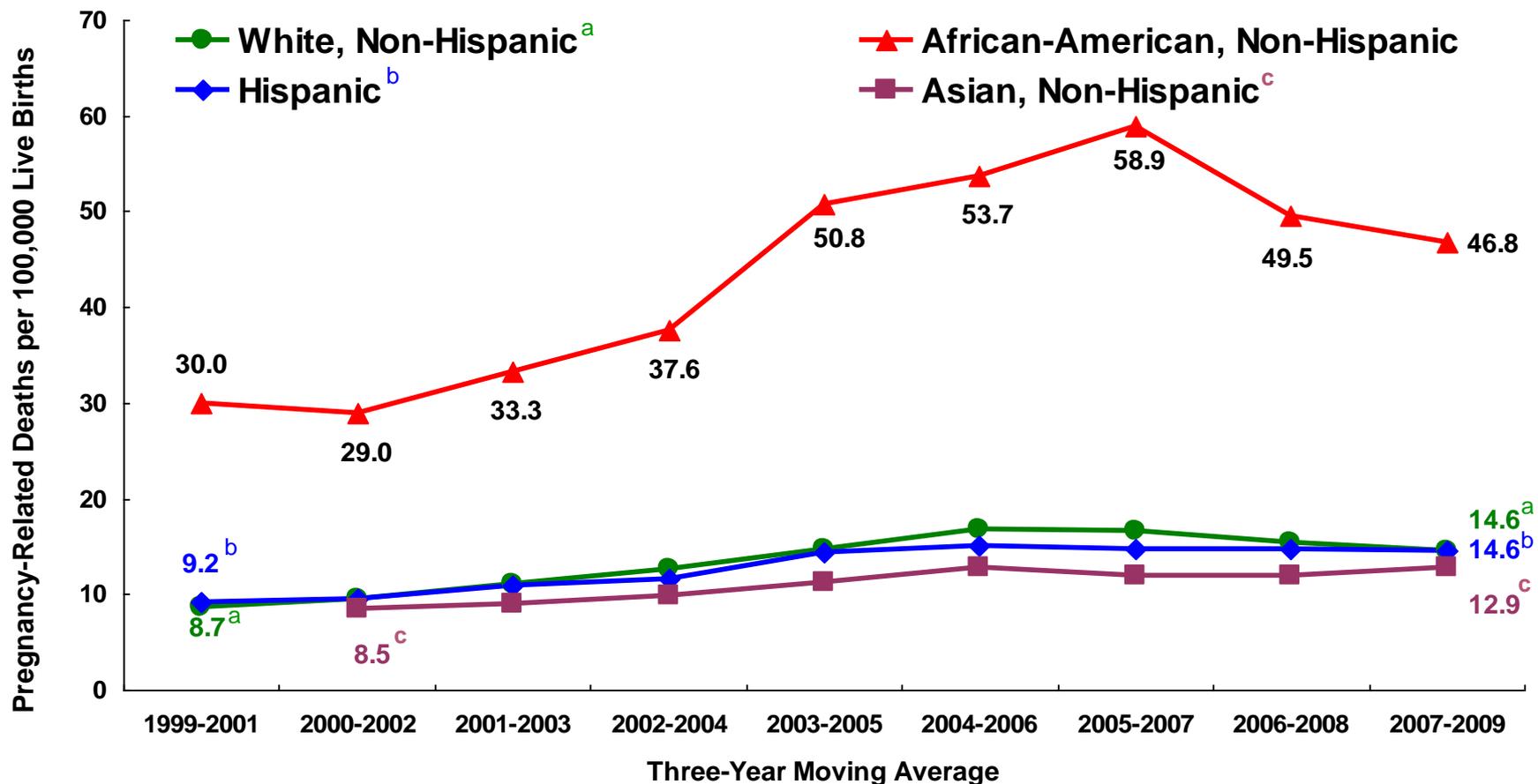
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2009. Maternal mortality for California (deaths  $\leq$  42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95, O98-O99) for 1999-2009. Pregnancy-related deaths include maternal mortality deaths plus obstetric deaths from 43 days to one year postpartum (code O96). On average, the maternal mortality rate increased by 4% each year [(95% CI: 1.2%, 6.1%)  $p=0.003$  Poisson regression] and the pregnancy-related mortality rate increased by 7% each year [(95% CI: 4.9%, 9.6%)  $p<0.001$  Poisson regression]. Both rates showed a statistically significant increasing trend from 1999-2009 ( $p=0.001$  one-sided Cochran-Armitage, based on individual year data.) Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, April, 2012.

# Number of Maternal and Pregnancy-Related Deaths, California Residents; 1999-2009



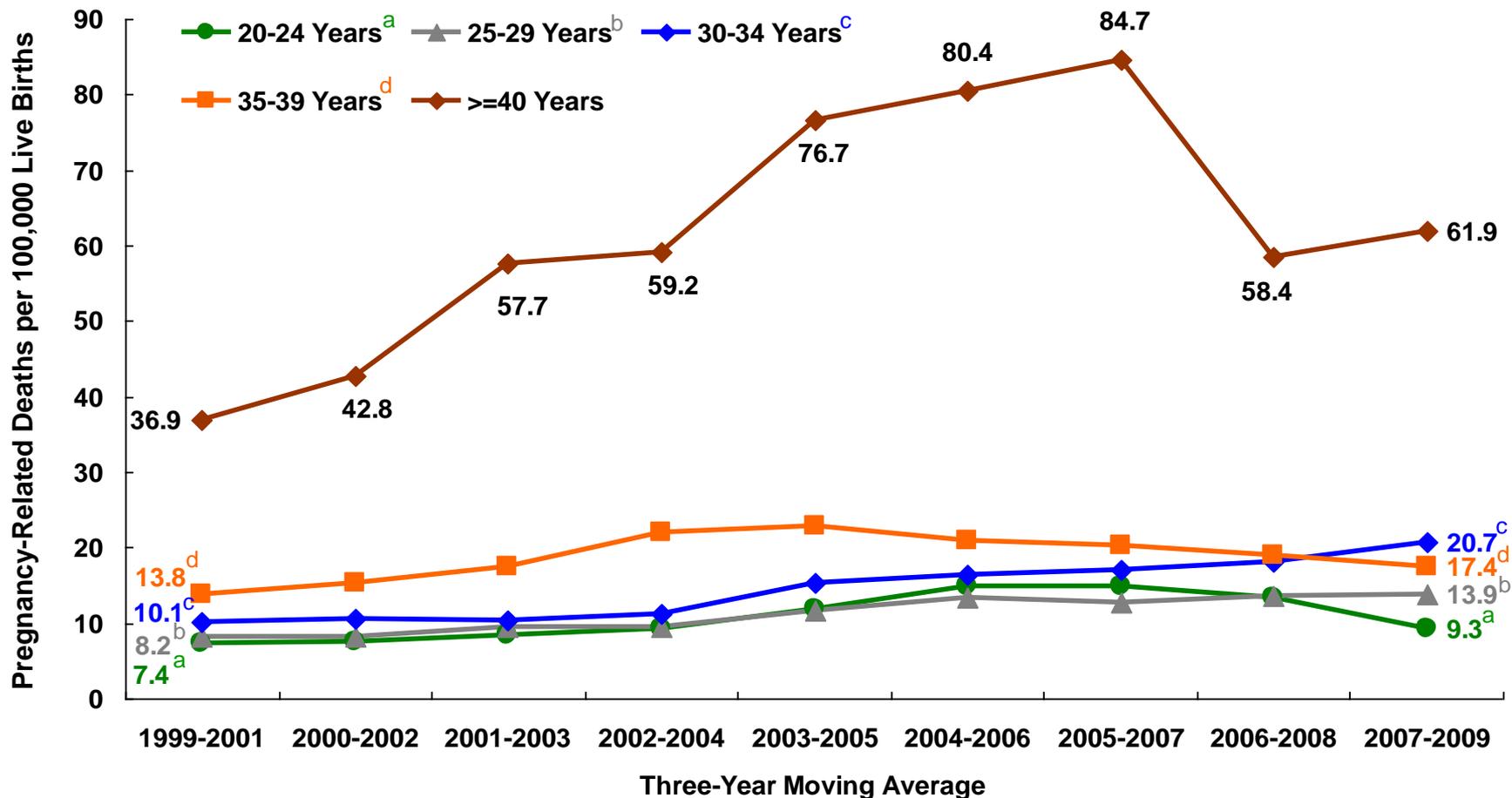
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2009. Beginning in 1999, maternal mortality for California (deaths from obstetric causes up to 42 days postpartum) was calculated using the ICD-10 cause of death classification (codes A34, O00-O95, O98-O99). Pregnancy-related deaths include maternal mortality deaths plus obstetric deaths from 43 days to one year postpartum (code O96). Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, April, 2012.

# Pregnancy-Related Mortality Rates by Race/Ethnicity, California Residents; 1999-2009



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2009. Beginning in 1999, pregnancy-related mortality for California (deaths from obstetric causes up to one year postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O96, O98-O99). Maternal single race code was used in 1999; multirace code used beginning 2000. Rates were not calculated if there were less than ten deaths for the specified period (e.g., for Asians in 1999-2001). Produced by California Department of Public Health, Maternal, Child and Adolescent Health Division, April, 2012.

# Pregnancy-Related Mortality Rates by Age Group, California Residents; 1999-2009



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2009. Beginning in 1999, pregnancy-related mortality for California (deaths from obstetric causes up to one year postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O96, O98-O99). Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, April, 2012.