

Definition: Maternal Mortality Rate

Maternal Mortality Rate

Death from obstetric causes ≤ 42 days 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:

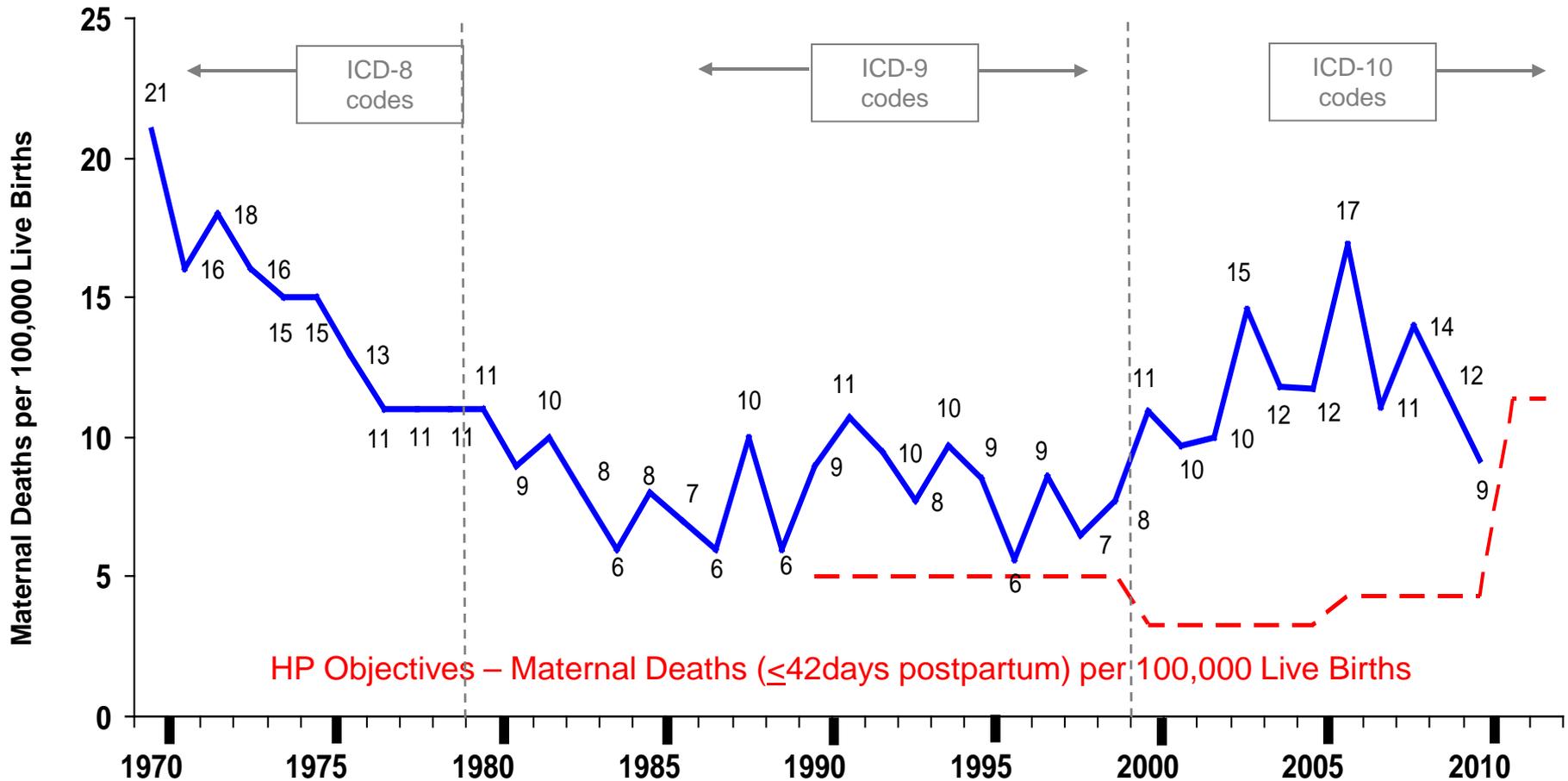
ICD-10 codes A34, O00-O95, O98-O99 for 1999-present

ICD-9 codes 630-638, 640-648, 650-676 for 1979-1998

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

- Same definition and method as U.S. rates calculated by National Center for Health Statistics
- Same definition and method used by Healthy People 2020 to create benchmark objective of 11.4 maternal deaths per 100,000 live births
- Used for reporting vital statistics and comparison of indicators and objectives
- Sometimes referred to as “Maternal Mortality Ratio”

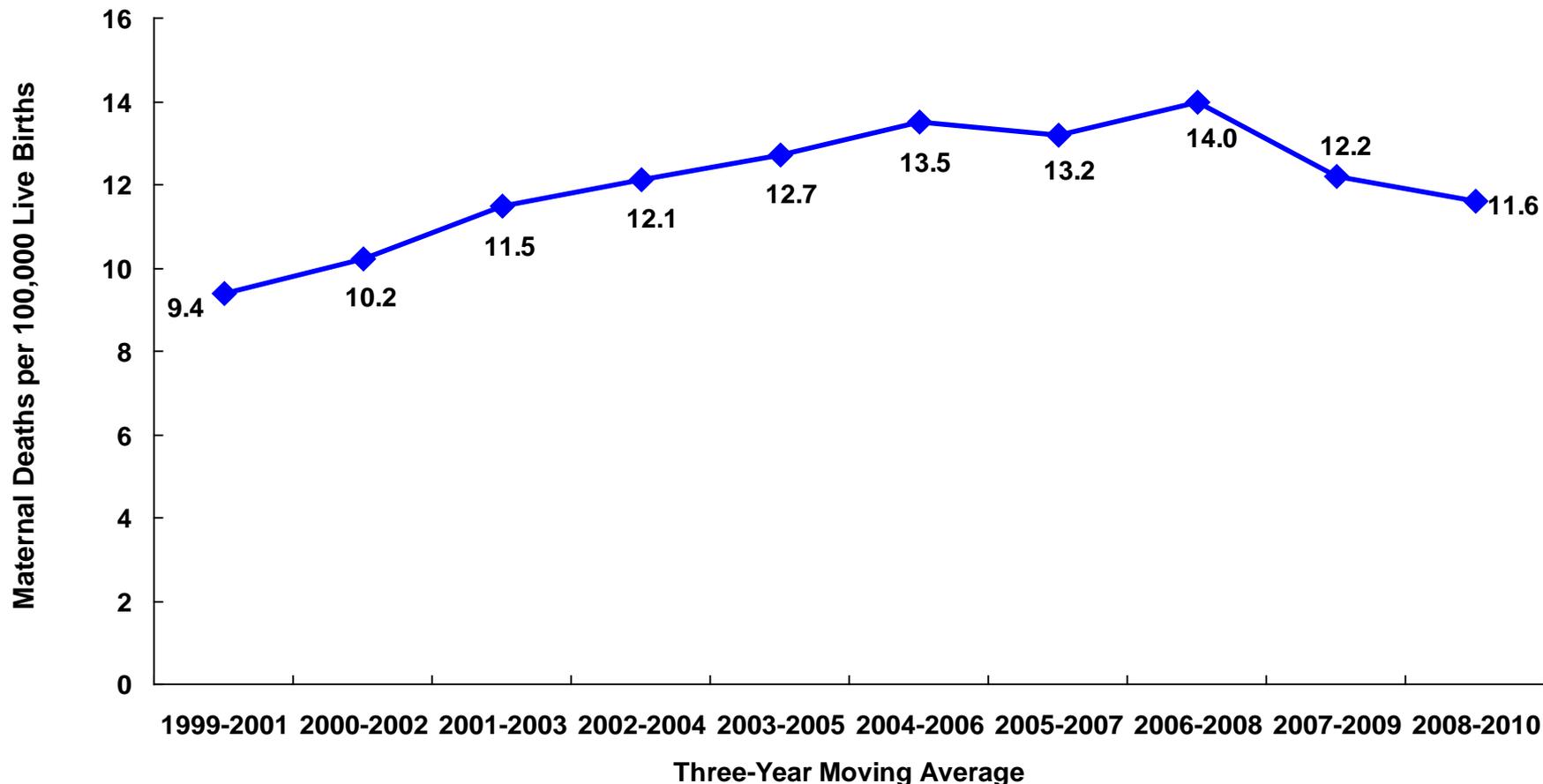
Maternal Mortality Rate, California Residents; 1970-2010



HP Objectives – Maternal Deaths (≤ 42 days postpartum) per 100,000 Live Births

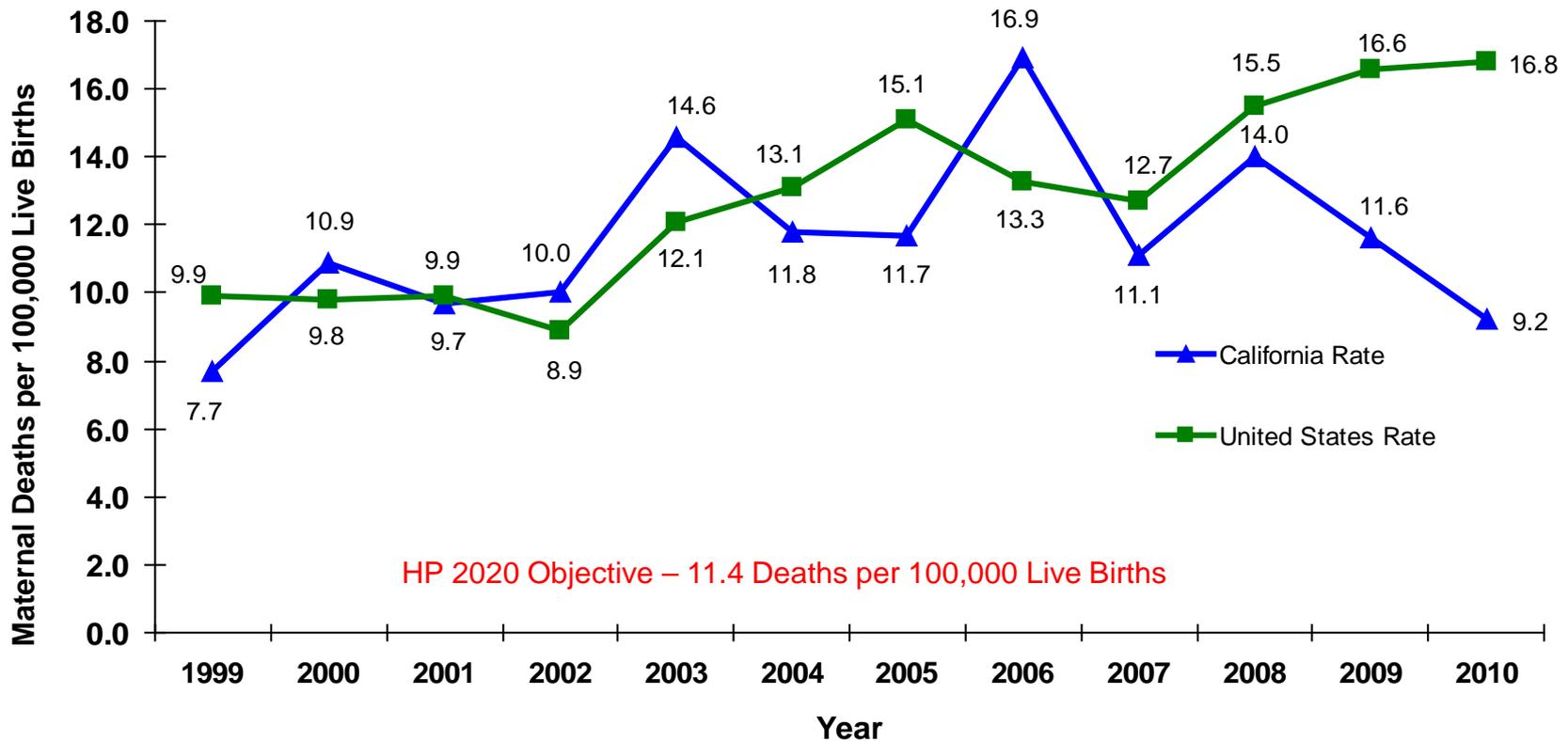
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1970-2010. Maternal mortality for California (deaths ≤ 42 days postpartum) was calculated using the ICD-8 cause of death classification for 1970-1978, ICD-9 classification for 1979-1998 and ICD-10 classification for 1999-2010. Healthy People Objectives: HP2000: 5.0 deaths per 100,000 live births; HP2010: 3.3 deaths, later revised to 4.3 deaths per 100,000 live births, and; HP2020: 11.4 deaths per 100,000 live births. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.

Moving Average of Maternal Mortality Rates, California Residents; 1999-2010



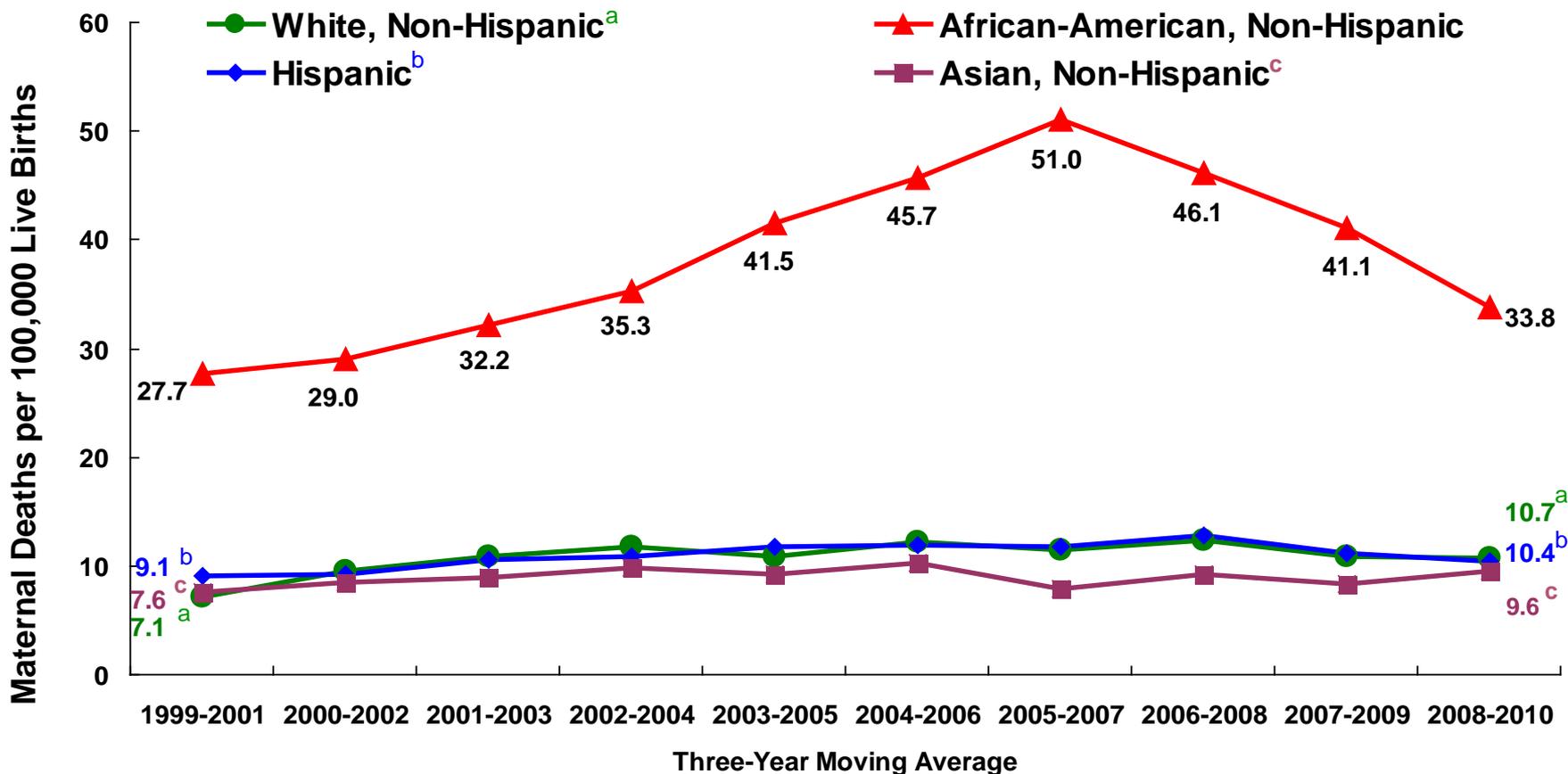
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality for California (deaths \leq 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95, O98-O99) for 1999-2010. On average, the mortality rate increased by 2% each year [(95% CI: 1.0%, 4.2%) $p=0.06$. Poisson regression] for a statistically significant increasing trend from 1999-2010 ($p=0.001$ 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, December, 2012.

Maternal Mortality Rate, California and United States; 1999-2010



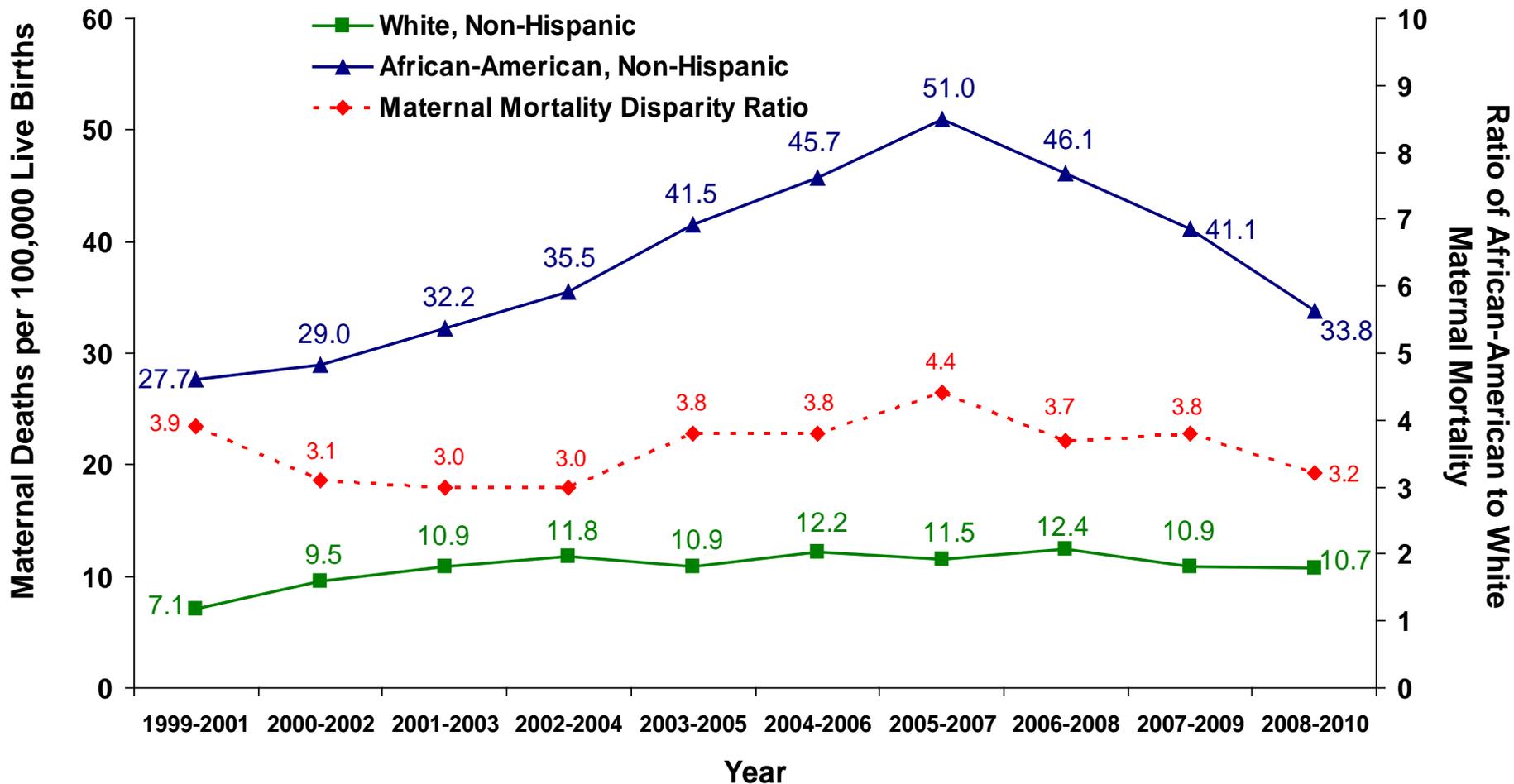
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality for California (deaths \leq 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95, O98-O99) for 1999-2010. United States data and HP2020 Objective were calculated using the same methods. U.S. maternal mortality data is published by the National Center for Health Statistics (NCHS) through 2007 only. U.S. rates from 2008-2010 were calculated using NCHS Final Death Data (denominator) and CDC Wonder Online Database for maternal deaths (numerator). Accessed at <http://wonder.cdc.gov/on> April 17, 2013. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.

Maternal Mortality Rates by Race/Ethnicity, California Residents; 1999-2010



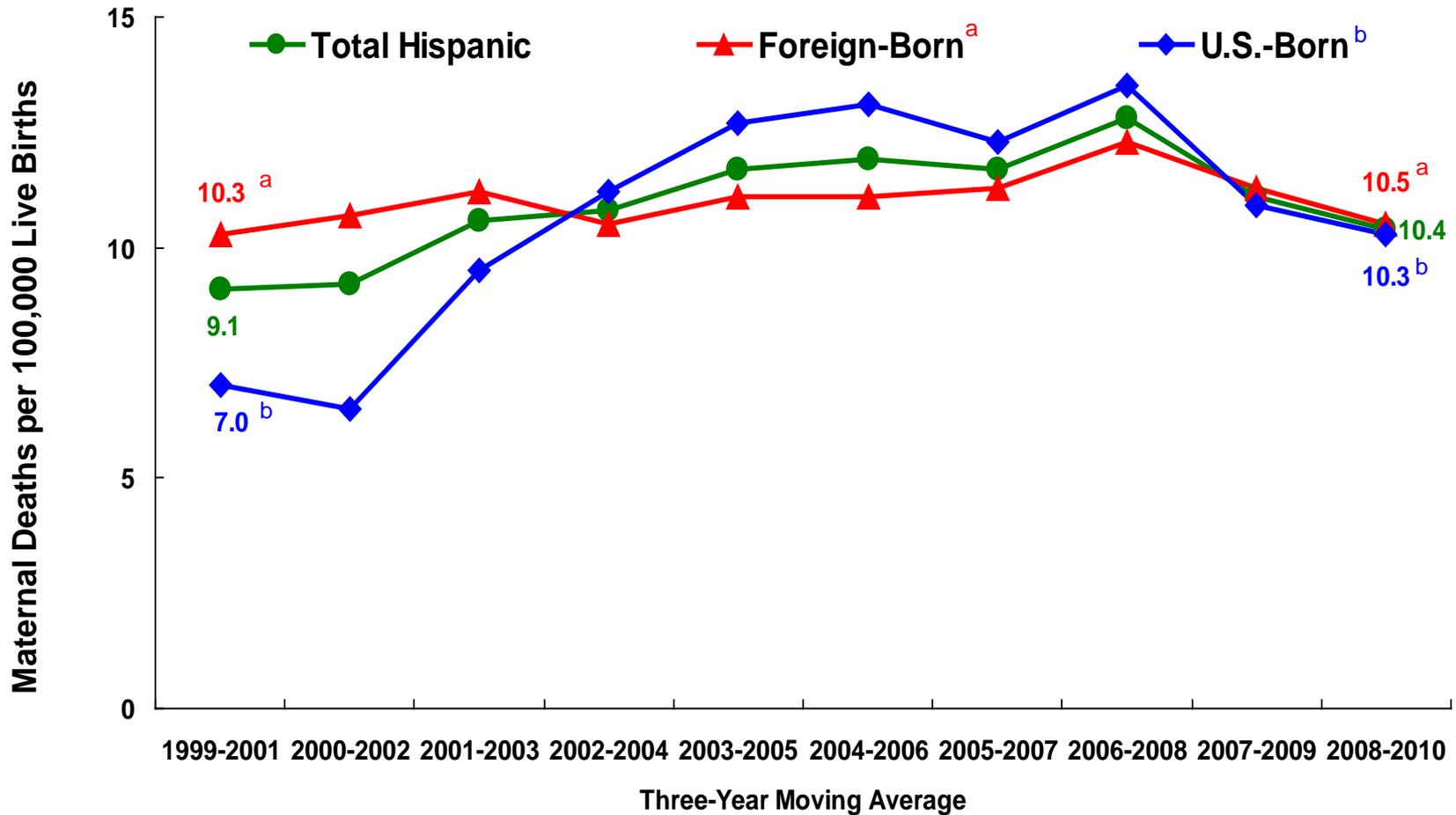
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality rates for California (deaths ≤ 42 days postpartum) were calculated using the ICD-10 codes for 1999 to 2010. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.

Disparities in Maternal Mortality by Race/Ethnicity, California Residents; 1999-2010



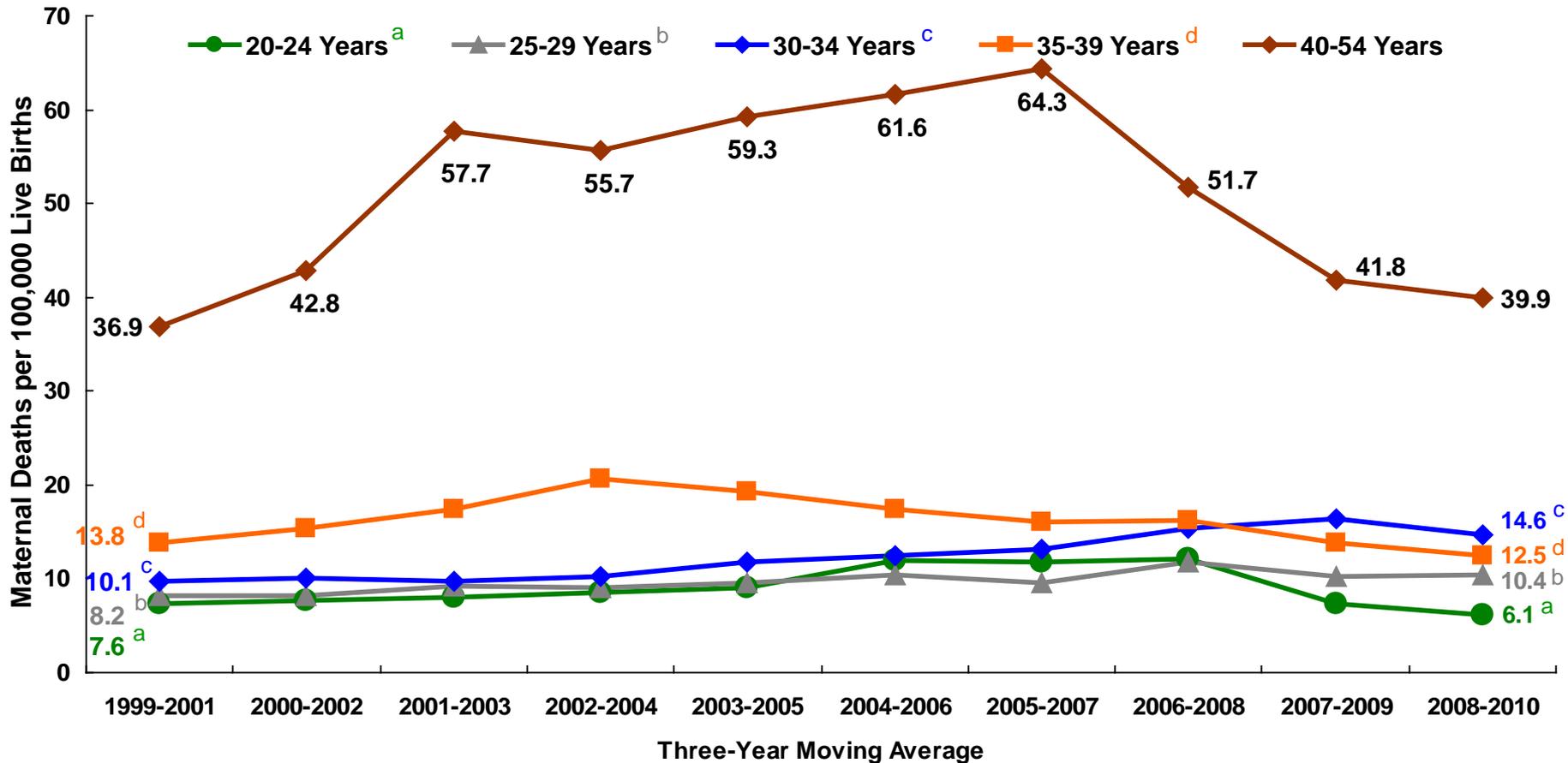
SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality rates for California (deaths ≤ 42 days postpartum) were calculated using the ICD-10 codes for 1999 to 2010. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.

Maternal Mortality Rates for U.S.- and Foreign-born Hispanic California Residents; 1999-2010



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality rates for California (deaths ≤ 42 days postpartum) were calculated using the ICD-10 codes for 1999 to 2010. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.

Maternal Mortality Rates by Age Group, California Residents; 1999-2010



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Beginning in 1999, maternal mortality for California (deaths \leq 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95, O98-O99). Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, December, 2012.