Births to adolescents aged 19 and below and preterm births have declined in California.1
There is considerable interest in identifying drivers of these declines.
The focus of this poster is to identify the contribution of declining births among adolescents and young adults ages 20-24 (YA) to the overall decline in preterm birth rate (PTB) between 2007 and 2014.

Methods

Kitagawa’s2 decomposition analyses were conducted to partition the effect of maternal age on the PTB decline into two components:

Component 1
Effects of shifting maternal age distribution = (P2014 – P2007) X (R2007 + R2014) + 2

Component 2

These analyses demonstrate the mathematical relationships between birthing patterns (age distribution and age-specific PTB) to the overall PTB decline in California between 2007 and 2014.

Overall decline in PTB from 2007 to 2014 was partly related to the decline in number of adolescent and YA births, with the largest total effects contributed by these two subpopulation groups.

Efforts to help adolescents and young adults avoid unplanned pregnancy and support them when pregnant to improve birth outcomes appear to also have direct effects on reducing PTB.

Intervention

Births to adolescents aged 19 and below and preterm births have declined in California.1
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Data Sources


Results

Between 2007 and 2014:
- BR among adolescents and YA declined by 51% and 32%, respectively
- PTB declined by 11% for both adolescents and YA

The proportion of births to adolescents (aged 19 and below) was nearly 10% in 2007 and was down to 5% in 2014.
At both time points, PTB was greater than 9 percent among mothers aged 19 and below. At both time points, PTB was greater than 9 percent among mothers aged 19 and below.

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References

1Adolescent births in California 2000-2014 Available at Adolescent-Health-Data at California Department of Public Health. 2014. California’s Preterm Birth Rate Declines to 9.6%, Meeting March of Dimes’ 2020 Goal Available at california-preterm-birth-rate-declines-to-9-meeting-march-of-dimes-2020-goal

Figure 1: Birth rates (BR) and PTBs among adolescents and young adults, Years 2007 – 2014

Figure 2: Percentages of live births and PTBs by maternal age, Years 2007 and 2014

DISCUSSION

These analyses demonstrate the mathematical relationships between birthing patterns (age distribution and age-specific PTB) to the overall PTB decline in California between 2007 and 2014.

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