Key Questions

1. Who is giving birth in Alameda County?

2. How healthy are moms and infants in Alameda County and what health inequities exist?

3. How healthy are youth and women of child bearing age in Alameda County and what inequities exist?

4. How has Alameda County been doing over time and within different communities?

5. How is Alameda County doing compared to Healthy People 2020 (HP2020) and within California?
Types of Data Presented

- **Count**: Number of events or cases at a given point in time.
  - Counts are used to look at the magnitude of the health event within a population.
  - In 2014, there were 19,573 births in Alameda County.

- **Percentage**: Proportion of total events over the total population that can be affected at a given point in time.
  - Percentages are used to compare populations of different sizes for example comparing different races/ethnicities.
  - In 2014, 7.6% of all Asian births were low birth weight births.
Types of Data Presented

- **Rate**: measure of a health event in a specific population over a set time period.
  - Rates are used to compare populations of different sizes or over different time periods, for example comparing Alameda County over time 2000-2014.
  - The Alameda County birth rate went from 15.3 births per 1,000 population in 2000 to 12.5 births per 1,000 population in 2014.

- **Ratio**: a relationship between two numbers indicating how many times the first number contains the second.
  - Ratios are used to show health disparities or to compare outcomes across different populations in the same time period.
  - In 2014, The percentage of low birth weight births among African Americans was 2.6 times the percentage of low birth weight births among Whites.
Who is giving birth in Alameda County?

- Births
- Trends
- Age
- Race/Ethnicity
- Foreign-Born Moms
- Location/Place
- First-Time Moms
- Medi-Cal Births
- Unintended Pregnancies
- Unmet Need for Family Planning
Birth Trend in Alameda County, 2000-2016

Number of Births

Annual Birth Rate Trend in Alameda County, 2000-2016

Birth Rate Trend by Race/Ethnicity, 2000-2014

Number of Births by Race/Ethnicity, 2014

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number of Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>5,973</td>
</tr>
<tr>
<td>Latino</td>
<td>5,323</td>
</tr>
<tr>
<td>White</td>
<td>4,552</td>
</tr>
<tr>
<td>African American</td>
<td>1,783</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>1,135</td>
</tr>
<tr>
<td>Multirace</td>
<td>558</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>218</td>
</tr>
<tr>
<td>American Indian</td>
<td>30</td>
</tr>
</tbody>
</table>

Total Births: 19,572

Birth Rate by Race/Ethnicity, 2014

Birth Rate by City/Place, 2014

- Ashland: 15.6
- Cherryland: 15.3
- Dublin: 15.1
- Hayward: 14.8
- Albany: 14.0
- Oakland: 13.7
- Newark: 13.6
- Fremont: 13.3
- Emeryville: 13.1
- Union City: 12.5
- Alameda County: 12.5
- Livermore: 12.4
- San Leandro: 12.1
- San Lorenzo: 11.6
- Alameda: 11.1
- Fairview: 11.0
- Castro Valley: 10.0
- Pleasanton: 8.3
- Berkeley: 7.4
- Piedmont: 5.4

Percentage of Births by Alameda County Hospital, 2008-2014

Percentage of Total Births by Age Category, 2000 v. 2014

Source: CAPE, with data from Alameda County Vital Statistics files, 2000 and 2014
Teen Birth Rate Trend by Race/Ethnicity, 2000-2014

Teen Birth Rate by Race/Ethnicity, 2014

Teen Birth Rate (# births 15-19 years/1,000 population 15-19 years)

- Pacific Islander: 31.5
- Latino: 24.3
- African American: 17.2
- All Races: 11.7
- Multirace: 7.9
- White: 2.9
- Asian: 1.7

565 Teen Births

Teen Birth Rate

Rate per 1,000 Females 15-19 Years
- 20.7 - 46.3
- 14.2 - 20.6
- 4.4 - 14.1
- 0.0 - 4.3
- No data or data suppressed

Alameda County rate: 14.1/1,000

Source: CAPE, with data from Alameda County vital statistics files, 2012-2014.
Percentage of First Child Births (First-time Moms) by Race/Ethnicity, 2014

10,884 First Child Births

- Multirace: 50.7%
- White: 49.0%
- Asian: 47.8%
- All Races: 44.4%
- African American: 41.7%
- American Indian: 36.7%
- Pacific Islander: 35.3%
- Latino: 35.2%

Percentage Births to Foreign-born Mothers by Race/Ethnicity, 2014

9,550 Foreign-born Mom Births

- Asian: 81.8%
- Latino: 54.2%
- All Races: 48.8%
- Pacific Islander: 48.2%
- White: 20.1%
- African Descent: 17.2%
- Multirace: 10.6%

# Top 5 Countries of Mothers’ Birth, 2014

## Asian

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Number live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>India</td>
<td>1,628</td>
</tr>
<tr>
<td>2</td>
<td>China</td>
<td>1,136</td>
</tr>
<tr>
<td>3</td>
<td>US</td>
<td>1,087</td>
</tr>
<tr>
<td>4</td>
<td>Philippines</td>
<td>664</td>
</tr>
<tr>
<td>5</td>
<td>Other Foreign</td>
<td>387</td>
</tr>
<tr>
<td>6</td>
<td>Vietnam</td>
<td>363</td>
</tr>
</tbody>
</table>

## Latino

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Number live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>US</td>
<td>2,438</td>
</tr>
<tr>
<td>2</td>
<td>Mexico</td>
<td>2,047</td>
</tr>
<tr>
<td>3</td>
<td>El Salvador</td>
<td>311</td>
</tr>
<tr>
<td>4</td>
<td>Other Foreign</td>
<td>270</td>
</tr>
<tr>
<td>5</td>
<td>Guatemala</td>
<td>251</td>
</tr>
</tbody>
</table>

Percentage of Medi-Cal Births Trend by Race/Ethnicity*, 2000-2014

*Medi-Cal births are underestimates due to missing data

Unintended Pregnancies US

- In 2011, 45% (2.8 million/6.1 million) pregnancies in the US each year were unintended.

- In 2011, 5% of reproductive-age women had an unintended pregnancy each year.

Demographic Disparities

- Teen Moms (15-17 years) & Young Moms (18-24 years)
- Poor Women (<200% Federal Poverty Level)
- Less than high school education
- Single/Cohabitating Moms
- Racial/Ethnic Groups

In 2010, 48% of all pregnancies (393,000) in California were unintended.

CA unintended pregnancy rate in 2010: 50 per 1,000 women aged 15–44 years.

- Range: 32/1,000 to 62/1,000
- CA has a high rate of unintended pregnancies compared to other states

In 2010, 42% of unintended pregnancies in California resulted in births; 45% in abortions; the remainder resulted in miscarriages.

In 2010, federal and state government spent $1.8 billion on unintended pregnancies in CA.

Unmet Need for Family Planning Services in CA

- In 2014, over 2.6 million CA women aged 13-44 years were in need of publicly funded family planning services.

- Publicly funded family planning centers in CA served 1.3 million female clients in 2014.

- Publicly funded family planning centers in CA helped avert over 321,000 unintended pregnancies in 2010.
  - This would have resulted in 156,000 unplanned births and 116,000 abortions.
  - This saved the state and federal government over $1.79 billion.

How healthy are moms & infants in Alameda County?

- Prenatal Care
- Breastfeeding
- Premature Birth
- Low Birth Weight
- Very Low Birth Weight
- Infant Deaths
- Fetal Deaths

- 2012-2014 Data
- Trends
- Race/Ethnicity
- Compared to HP2020 & California
Percentage of First Trimester Prenatal Care Trend by Race/Ethnicity, 2000-2014

Percentage of exclusive early breastfeeding by race/ethnicity, 2015

1.3 times

Percentage Exclusively Breastfed Newborn in Hospital (%)

- American Indian: 100.0%*
- White: 88.9%
- Multirace: 84.3%
- All Races: 82.9%
- Latino: 81.2%
- Asian: 80.3%
- African American: 78.7%
- Pacific Islander: 70.5%

*American Indian Percentage is likely an overestimate due to small population.

Source: California Department of Public Health, In-Hospital Breastfeeding, 2015.
https://archive.cdph.ca.gov/data/statistics/Documents/County%20of%20Residence%20Race_Ethnicity%20Report%202015.pdf
Percentage of Premature Births Trend by Race/Ethnicity, 2000-2014

Percentage of Premature Births (<37 weeks gestation age)

AfAm/Black
All Races
Multirace
Asian
White
PacIsl
Hisp/Lat

Percentage Low Birth Weight (LBW) and Very Low Birth Weight (VLBW) Births by race/ethnicity, 2014

- African American: 2.1% LBW, 1.1% VLBW
- Asian: 7.6% LBW, 1.2% VLBW
- All Races: 6.9% LBW, 1.2% VLBW
- Multirace: 6.5% LBW, 1.2% VLBW
- Latino: 6.2% LBW, 1.2% VLBW
- Pacific Islander: 5.3% LBW
- White: 4.5% LBW, 0.8% VLBW

Number of Infant Deaths Trend in Alameda County, 2000-2014

Infant Mortality Rate Trend in Alameda County, 2000-2014

Percentage of Births v. Infant Deaths by Race/Ethnicity, 2012-2014

Births=19,397

- African American 9.8% (1,894)
- Latino 27.6% (5,350)
- Asian 29.7% (5,752)
- White 23.7% (4,599)
- Multirace 2.8% (4,599)
- Other/Unknown 5.2% (1,011)
- Pacific Islander 1.1% (209)

Infant Deaths= 78

- African American 27.8% (22)
- Latino 25.6% (20)
- Asian 19.7% (15)
- White 17.5% (14)
- Multirace 6.4% (5)
- Pacific Islander 0.9% (1)
- Other/Unknown 0.9% (1)

Infant Mortality Rate Trend by Race/Ethnicity, 2000-2014


AfAm/Black: 4.3 times
## Leading Causes of Infant Death in Alameda County, 2012-2014

<table>
<thead>
<tr>
<th>Cause</th>
<th>3-Yr Total Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital Malformations &amp; Chromosomal Abnormalities</td>
<td>52</td>
<td>22%</td>
</tr>
<tr>
<td>Disorders Related to Short Gestation &amp; Low Birth Weight</td>
<td>30</td>
<td>13%</td>
</tr>
<tr>
<td>Sudden Infant Death Syndrome</td>
<td>23</td>
<td>10%</td>
</tr>
<tr>
<td>Newborn Affected by Complications of Placenta, Cord, Membranes</td>
<td>11</td>
<td>5%</td>
</tr>
<tr>
<td>All Other Causes</td>
<td>118</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>234</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

SIDS Deaths in Alameda County

Over the last five years, Alameda County had an average of 8 SIDS cases per year.

SIDS cases in Alameda County by Race/Ethnicity, 2010-2014
5-Year Total

- African American 37.5% (15)
- Latino 15.0% (6)
- Asian/Pacific Islander 15.0% (6)
- White 12.5% (5)
- Multirace 15.0% (6)

SIDS Trend in Alameda County

The trend shows a slight decrease in SIDS rates over time that is not statistically significant (p=0.07)

Fetal Mortality Rate by Race/Ethnicity, 2010-2012

13.5
9.5
5.4
4.2
4.1
2.9

African American
Multirace
All Races
Asian
Latino
White

Fetal Mortality Rate (Fetal deaths/1,000 births+fetal deaths)

4.7 times


104 average annual fetal deaths, 2010-2012.
## Comparisons: Infant Health Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>HP2020</th>
<th>California</th>
<th>Alameda County</th>
<th>AC Ranking</th>
<th>High risk R/E Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Trimester Prenatal Care</td>
<td>77.9% or more</td>
<td>83.5%</td>
<td>90.1%</td>
<td>3/58</td>
<td>Pacific Islanders 79.3%</td>
</tr>
<tr>
<td>Breastfeeding Initiation</td>
<td>81.9% or more</td>
<td>68.8%</td>
<td>82.9%</td>
<td>—</td>
<td>Pacific Islanders 70.5%</td>
</tr>
<tr>
<td>Exclusive Breastfeeding 3 months after delivery</td>
<td>46.2%</td>
<td>27.4%</td>
<td>34.0%</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

## Comparisons: Infant Health Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>HP2020</th>
<th>California</th>
<th>Alameda County</th>
<th>AC Ranking</th>
<th>High risk R/E Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature Births</td>
<td>11.4% or less</td>
<td>8.8%</td>
<td>8.2%</td>
<td>—</td>
<td>African Americans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.9%</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>7.8% or less</td>
<td>6.7%</td>
<td>6.9%</td>
<td>50/58</td>
<td>African Americans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.6%</td>
</tr>
<tr>
<td>Very Low Birth Weight</td>
<td>1.4% or less</td>
<td>1.2%</td>
<td>1.2%</td>
<td>—</td>
<td>African Americans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>6.0/1000 or fewer</td>
<td>4.7/1000</td>
<td>4.0/1000</td>
<td>18/58</td>
<td>African Americans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.4/1000</td>
</tr>
<tr>
<td>Fetal Mortality Rate</td>
<td>5.6/1000 or fewer</td>
<td>4.8/1000</td>
<td>5.4/1000</td>
<td>—</td>
<td>African Americans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.5/1000</td>
</tr>
</tbody>
</table>

The Life Course Perspective in Alameda County
Racial Redlining in Alameda County
Proportion Living in a High Poverty Neighborhood (where >20% of residents are poor) by Race

1 in 15 White residents live in high-poverty neighborhoods, compared to:

1 in 9 Asians

1 in 4 Latinos

1 in 3 Blacks

Source: CAPE with data from American Community Survey, 2006-2010 and Census, 2010
Compared to Whites in the Oakland Hills, Blacks in East Oakland are...

<table>
<thead>
<tr>
<th>Category</th>
<th>Statistic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT</td>
<td>Over 2 times</td>
<td>more likely to be born low birth weight</td>
</tr>
<tr>
<td></td>
<td>10 times</td>
<td>less likely to have a mother with a college degree</td>
</tr>
<tr>
<td></td>
<td>32 times</td>
<td>more likely to live in poverty</td>
</tr>
<tr>
<td></td>
<td>5 times</td>
<td>more likely to be unemployed</td>
</tr>
<tr>
<td></td>
<td>3 times</td>
<td>less likely to read at grade level</td>
</tr>
<tr>
<td></td>
<td>1.3 times</td>
<td>more likely to die of stroke</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>14-year difference in life expectancy</td>
</tr>
</tbody>
</table>

Cumulative impact:

Compared to people living in affluent neighborhoods of Alameda County, residents of very high poverty neighborhoods are:

- *2X* more likely to lack access to employment
- *Over 4X* more likely to be living in overcrowded households
- Facing nearly *8X* higher rates of homicide
- *5X* more likely to be locked up as a youth for overwhelmingly nonviolent offenses
- Burdened by a *4X* higher density of industrial chemical and fuel release sites that pollute water and soil
MCH Indicators by Social Gradient

- Teen Birth Rate
- Infant Mortality Rate
- % Low Birth Weight
Teen Birth Rate by Poverty Level and Race/Ethnicity, 2010-2014

Infant Mortality Rate by Poverty Level, 2010-2014

% Low Birth Weight by Poverty Level and Race/Ethnicity, 2010-2014

Impacts of Racism on Health

Source: Camara Jones, American Journal of Epidemiology, 2001
Improving African American Birth Outcomes

- MPCAH Response: A specific and intensive focus on African American women to reduce perinatal inequities
  - Case management for highest risk women and families
  - Outreach, pregnancy navigation and support
  - Club Mom, Community Baby Showers, Boot Camp for New Dads
  - Place-based approaches (Best Babies Zone)
  - Financial security programs (Financial Tools and $olutions: asset building grants and financial coaching)
How healthy are youth in Alameda County?

- Childhood Poverty
- High School Dropouts
- Homicides
- Race/Ethnicity
Children Living in Poverty by Race/Ethnicity, 2015

- African American: 29.7%
- American Indian*: 25.3%
- Latino: 20.1%
- All races: 13.6%
- Multirace: 13.3%
- Asian: 8.0%
- Pacific Islander*: 7.4%
- White NH: 4.2%

7.1 times

*Data for American Indians and Pacific Islanders is from 5 year census files- 2011-2015.
Source: Cape with data from US Census Bureau American Community Survey, 1 year file 2015.
Cohort High School Drop Out Rate by Race/Ethnicity, 2014-2015


Population (15-24) = 212,111

- White: 26.5%
- African American: 12.3%
- Latino: 28.9%
- Multirace: 5.5%
- Asian: 25.1%
- American Indian: 0.3%
- Pacific Islander: 0.9%
- Other: 0.3%

Homicides (15-24) = 43

- African American: 62.8%
- Latino: 20.9%
- Multirace: 5.4%
- White: 2.7%
- Pacific Islander: 1.4%
- American Indian: 0.3%
- Asian: 5.4%
- Other: 0.3%

How healthy are women (15-44 years) in Alameda County?

- Women living in Poverty
- Less than High School Education
- Race/Ethnicity
<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage Women 15-44 living in poverty (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>27.0%</td>
</tr>
<tr>
<td>American Indian*</td>
<td>19.8%</td>
</tr>
<tr>
<td>Latino</td>
<td>18.8%</td>
</tr>
<tr>
<td>Pacific Islander*</td>
<td>15.5%</td>
</tr>
<tr>
<td>All races</td>
<td>14.9%</td>
</tr>
<tr>
<td>Multirace</td>
<td>14.3%</td>
</tr>
<tr>
<td>White NH</td>
<td>11.7%</td>
</tr>
<tr>
<td>Asian</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

2.6 times more likely to live in poverty compared to All races.

*Data for American Indians and Pacific Islanders is from 5 year census files - 2011-2015.

Source: Cape with data from US Census Bureau American Community Survey, 1 year file 2015.
Women and Children Living in Poverty by Race/Ethnicity, 2015

*Data for American Indians and Pacific Islanders is from 5 year census files- 2011-2015.

Source: Cape with data from US Census Bureau American Community Survey, 1 year file 2015.
Women with Less than High School Education by Race/Ethnicity, 2015

Percentage Women 18-44 years with less than HS Education (%)

- Latino: 24.0%
- All races: 9.7%
- American Indian*: 9.4%
- African American: 8.9%
- Pacific Islander: 7.4%
- Multirace: 5.1%
- Asian: 3.6%
- White: 2.1%

11.4 times

Source: Cape with data from IPUMS USA Integrated files, 1 year file 2015.
Key Takeaways

1. Who is giving birth in Alameda County (AC)?
   - There has been a ↓ in AC births since 2000. (Ave. 19,500 births per year since 2012.)
   - Asians and Latinos have the largest # of births. Pacific Islanders have the highest birth rate.
   - AC has seen a dramatic ↓ in teen moms (15-19 years) and an ↑ in mature moms (35-44 years).
   - AC has large % of foreign-born moms (Asian, Latino).

2. How healthy are moms and infants in Alameda County?
   - Overall, AC moms and infants are very healthy!
   - AC has high % of moms receiving prenatal care and breastfeeding. (Pacific Islanders inequities persist.)
   - AC has seen a ↓ in infant mortality and preterm births over time.
   - Other AC indicators have remained steady. Likely due to persistent African American inequities.
Key Takeaways

3. How healthy are youth and women in Alameda County?
   - Racial/ethnic inequities exist in key SES indicators: high school completion, homicides, and poverty rates.
   - African American, Latino, and American Indians children and women are most affected.

4. How has Alameda County been doing over time and within different communities?
   - High neighborhood poverty is associated with poor mom and infant health outcomes.
   - Life course approaches are needed.
   - MPCAH has targeted programs to improve African American mother, infant and child outcomes.

5. How is Alameda County doing compared to Healthy People 2020, within California?
   - AC does very well compared to other counties on key birth and family planning indicators.
   - Almost all AC indicators meet or exceed HP2020 benchmarks.
EVERYONE in Alameda County – no matter who you are, where you live, how much money you make, or the color of your skin – can lead a healthy, fulfilling and productive life.
Data Sources

- Alameda County vital statistics files: Birth, Death, and Fetal Deaths
- CAPE with data from US Census 2010 and Esri
- US Census Bureau, American Community Survey
- Guttmacher Institute (Unintended Pregnancy)
- California Department of Public Health (CDPH) In-hospital breast feeding Assessment
- Healthy People 2020
- CDPH 2016 County Health Profiles
- California Department of Education

Lisa Goldberg, MPCAH Epidemiologist, Alameda County Public Health Department. Contact by phone at 510-267-8024 or by email: lisa.goldberg@acgov.org

Kiko Malin, Director, Family Health Services Division, Alameda County Public Health Department. Contact by phone at 510-267-5979 or by email: kiko.malin@acgov.org