EVERY BABY COUNTS!
ALAMEDA COUNTY BIRTH DATA QUALITY MEETING

Maternal, Paternal, Child and Adolescent Health (MPCAH)
Community Assessment Planning and Evaluation Unit (CAPE)
Vital Registration
Alameda County Public Health Department
Health Care Services Agency

September 21, 2017
Welcome! and Introductions
Why Are We Here Today?

- Participate in the ACPHD Every Baby Counts! Birth Certificate Data Quality Improvement Initiative
- Discuss current level of AC birth certificate data quality (issues and improvements)
- Discuss public health importance and ACPHD uses of birth certificate data
- Obtain feedback on educational materials
- Share challenges and successful strategies for obtaining high quality birth certificate data
- **Goal:** To be the leader in birth certificate data quality in CA.
Meeting Agenda

12:30 pm - 1:00 pm  Lunch

1:00 pm - 1:45 pm  Alameda County Birth Certificate Data Presentation: Data Quality, Importance and Use

1:45 pm - 2:15 pm  Review Fact Sheet for Expectant Moms - “Your Baby Needs a Birth Certificate”

2:15 pm - 2:30 pm  Break

2:30 pm - 2:50 pm  St. Rose Hospital Tips for Obtaining High Quality Birth Certificate Data

2:50 pm - 3:30 pm  Peer Discussion of Challenges and Successful Strategies
Update: AC Birth Certificate Data Quality
Birth Certificate Data Quality

Topics Covered

- Birth Trends by Hospital and Race/Ethnicity
- Increased “Declined to State” (DTS) Mother’s Race/Ethnicity
- Underreported Medi-Cal Births
- Improvements in Reporting Gestational Age and Prenatal Care Visits

Analyses

- Annual and Quarterly Trends
- Race/Ethnic Subgroup Comparisons
- Alameda County (AC) Birthing Hospital Comparisons (lowest and highest %)
Birth Trend in Alameda County, 2000-2016

Number of Births

Percentage of Alameda County Births by Hospital, 2008-mid 2017

* 2015-2017 Birth data is from AVSS and is considered preliminary estimates
The Birth Certificate allows mothers to select up to 3 race groups and Latino/Hispanic ethnicity. Mother’s race/ethnicity determines baby’s race/ethnicity. Race/Ethnicity is mutually exclusive (one category per mother & baby).

**Race Categories**
- African American NH
- American Indian NH
- Asian NH
- Pacific Islander NH
- White NH
- Multirace NH - More than 1 of the above

**Hispanic/Latino Ethnicity - Any Race**
- Mexican
- Chicano
- Puerto Rican
- Cuban
- Central/South American

**Declined to State (DTS) Race/Ethnicity**
- Mother’s Race/Ethnicity not included on baby’s birth certificate
- “Refused to State” or “Unknown”
Percentage of Alameda County Births by Mother’s Race/Ethnicity, 2000-2016


* 2015-2017 Birth data is from AVSS and is considered preliminary estimates.
Percentage of Births by Mother’s Race/Ethnicity 2008 v 2016

**2008 Births=20,902**
- Latino 31.7%
- White 24.3%
- African American 11.6%
- Asian 26.3%
- Multirace 2.5%
- Declined to State (DTS) 2.2%
- Pacific Islander 1.0%
- American Indian 0.2%

**2016* Births: 19,555**
- Latino 26.2%
- White 23.1%
- African American 8.1%
- Asian 31.5%
- Multirace 3.2%
- Declined to State (DTS) 6.7%
- Pacific Islander 0.9%
- American Indian 0.2%

*Source: CAPE, with data from Alameda County Vital Statistics files, 2008 & 2016. *2016 Birth data is from AVSS and is considered preliminary estimates.
Quarterly Percentage of “Declined To State” (DTS) Mother’s Race/Ethnicity Births, 2015-mid 2017

Target= 1.0%


* 2015-2017 Birth data is from AVSS and is considered preliminary estimates
Public Health Importance of Mother’s Race/Ethnicity

- Mother’s race/ethnicity determines baby’s race/ethnicity.
- It is critical to understanding the health of moms and babies in Alameda County.
- All MCH indicators are broken out by race/ethnicity.
- Alameda County has big disparities in birth outcomes by race/ethnicity.
- ACPHD uses mother’s race/ethnicity to
  - Identify vulnerable populations
  - Develop culturally appropriate interventions
  - Target programs and services
  - Enroll mothers, babies and families

Goal: We want every mother to include their race and/or ethnicity on their baby’s birth certificate.
Underreporting of Alameda County Medi-Cal Births, 2008-mid 2017

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</thead>
<tbody>
<tr>
<td>AC County- Dept. of Health Care Services (DHCS)</td>
<td>35.8%</td>
<td>37.4%</td>
<td>38.3%</td>
<td>38.4%</td>
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<tr>
<td>AC County- Birth Certificate Data</td>
<td>31.7%</td>
<td>31.4%</td>
<td>30.7%</td>
<td>29.9%</td>
<td>29.1%</td>
<td>26.4%</td>
<td>25.9%</td>
<td>24.0%</td>
<td>23.3%</td>
<td>22.4%</td>
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<tr>
<td>Highest % among AC Hospitals</td>
<td>99.0%</td>
<td>99.2%</td>
<td>99.3%</td>
<td>99.1%</td>
<td>94.3%</td>
<td>93.2%</td>
<td>94.8%</td>
<td>91.9%</td>
<td>94.0%</td>
<td>99.7%</td>
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<tr>
<td>Lowest % among AC Hospitals</td>
<td>0.0%</td>
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- The number and percentage of Medi-Cal paid for births in Alameda County are underestimates due to underreporting on the birth certificates.
- In 2011, the Alameda County Birth Certificate Data reported almost 1,600 fewer (8.5%) Medi-Cal births than California Department of Health Care Services (DHCS).
- It is estimated that over one-third of all births to Alameda County residents were paid through Medi-Cal.
- The percentage of Medi-Cal births varies by AC Hospital.

## Improvement in Percentage of Gestational Age, 2015- mid 2017

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<tr>
<td></td>
<td>% Inc/Unk</td>
<td>% Inc/Unk</td>
<td>% Inc/Unk</td>
<td>Percentage Points</td>
<td>%</td>
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<tr>
<td>Highest % among AC Hospitals</td>
<td>7.7%</td>
<td>9.1%</td>
<td>0.3%</td>
<td>8.8 percentage points</td>
<td>96.7%</td>
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<td>Alameda County</td>
<td>1.4%</td>
<td>1.5%</td>
<td>0.7%</td>
<td>0.8 percentage points</td>
<td>57.1%</td>
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<tr>
<td>Lowest % among AC Hospitals</td>
<td>0.1%</td>
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- Gestational Age is used to determine premature births. (Births that occur <37 weeks gestation age.)
- Incorrect (Inc) gestation ages include those reported at <118 or >355 days.
- Unknown (Unk) gestation ages are not included on birth certificates.

* 2015-2017 Birth data is from AVSS and is considered preliminary estimates
## Improvement in Percentage of Prenatal Care Visits, 2015- mid 2017

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<tbody>
<tr>
<td></td>
<td>% Unk</td>
<td>% Unk</td>
<td>% Unk</td>
<td>Percentage Points</td>
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<tr>
<td>Highest % among AC Hospitals</td>
<td>40.7%</td>
<td>16.7%</td>
<td>0.1%</td>
<td>40.5 percentage points</td>
<td>99.5%</td>
</tr>
<tr>
<td>Alameda County</td>
<td>2.5%</td>
<td>1.4%</td>
<td>0.3%</td>
<td>2.2 percentage points</td>
<td>88.0%</td>
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<tr>
<td>Lowest % among AC Hospitals</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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- Number of Prenatal Care Visits is used to determine adequacy of prenatal care.
- Adequate prenatal care includes women having 3 or more prenatal visits during their pregnancy.

## Improvement in Percentage of Month Prenatal Visits Began, 2015- mid 2017

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<tbody>
<tr>
<td></td>
<td>% Unk</td>
<td>% Unk</td>
<td>% Unk</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Highest % among AC Hospitals</td>
<td>15.8%</td>
<td>13.2%</td>
<td>0.3%</td>
<td>15.5 percentage points</td>
<td>98.1%</td>
</tr>
<tr>
<td>Alameda County</td>
<td>1.4%</td>
<td>1.2%</td>
<td>0.4%</td>
<td>1.0 percentage points</td>
<td>71.4%</td>
</tr>
<tr>
<td>Lowest % among AC Hospitals</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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</table>

- Month prenatal care began is used to determine first trimester entry into prenatal care.
- First Trimester Prenatal Care includes women who began prenatal care within the first three months of their pregnancy.
- Unknown (Unk) month prenatal care began occurs when month is not included on birth certificates.

*Source: Alameda County Vital Statistics files Birth Files Jan 1, 2015- June 30, 2017. *2015-2017 Birth data is from AVSS and is considered preliminary estimates*
Conclusions: Birth Certificate Data Quality

- There has been a decrease in AC births since 2000. (Ave. 19,500 births per year since 2012.)

- About 80% of AC births occurred at AC Hospitals (Individual Hospital Range 3%-21%).

- There has been an increase in births to mothers who “Declined to State” (DTS) their race/ethnicity (three-fold increase since 2008). This leads to gaps in understanding health disparities and developing culturally appropriate services.

- Since 2012 DTS births comprised the 5th largest race/ethnic subgroup in Alameda County and is almost the same % as African American births.
Conclusions: Birth Certificate Data Quality

- The % of DTS mother’s race/ethnicity births varied by hospital with a low of 0.0% and a high of 44.9% between 2008- mid 2017.

- AC has seen improvements in reporting mother’s race/ethnicity in 2017, but issues persist.

- Medi-Cal births are substantially underreported on birth certificates. This leads to funding shortfalls and eligibility problems for Public Health and Education programs.

- AC Hospitals have greatly improved their reporting on gestational age, number of prenatal visits and month prenatal care began in 2017.
Key Maternal and Infant Birth Indicators
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%
Percentage of First Trimester Prenatal Care Trend by Race/Ethnicity, 2000-2014

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) by Race/Ethnicity, 2014

- African American: 11.6% LBW, 2.1% VLBW
- Asian: 7.6% LBW, 1.1% 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, 1.2% VLBW
- White: 4.5% LBW, 0.8% VLBW

2.6 times higher risk of VLBW among African American compared to White.

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: 5.2% (1,011)

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

Conclusions: Maternal and Infant Health

- Overall, AC moms and infants are very healthy!
- Inequities by race/ethnic group persist, especially among Pacific Islander and African American moms.
- Mother’s race/ethnicity is the key factor public health uses to understand the health of moms and babies in Alameda County.
- MPCAH has targeted and culturally relevant programs to improve mother, infant, child, and family outcomes.
- **Goal:** We need *every mother* to include their race/ethnicity on their baby’s birth certificate so their baby can be counted!
ACPHD Use of Birth Certificate Data
Overview of MPCAH Home Visiting Programs

**Serve:**
Low-income and multi-stressed pregnant women, mothers, fathers, and families with young children in Alameda County.

**Vision Statement:**
Pregnant women, mothers, fathers and families with young children will live in healthy and thriving communities and will have access to comprehensive, responsive, community-driven health care.

**Programs:**
- Black Infant Health
- Brighter Beginnings
- DREAMS
- Fatherhood Initiative
- Family Health Promotion
- Healthy Families America
- Mental Health Wellness Team
- Native American Health Center
- Nurse Family Partnership
- Special Start at ACPHD
- Special Start at BCHO
- Tiburcio Vasquez Health Center
- Women’s Health Promotion
Population Served

Clients Served
- 655 Children
- 1,543 Families
- 874 IC Parenting women
- 477 Pregnant women
- 40 Fathers

Race/Ethnicity
- Hispanic, 51.3%
- Black/African American, 31.9%
- White, 5.4%
- Asian, 7.5%
- Native Hawaiian or Pacific Islander, 2.5%
- American Indian or Alaskan Native, 0.3%
- Other, 1.1%
Services Provided Through Home Visiting

- Comprehensive case management, needs assessment, family goal setting
- Screening and monitoring - perinatal depression, substance use, IPV, and child development
- Parent education and support using evidence-informed parenting curriculum. i.e. Partners for a Healthy Baby or Growing Great Kids
- Linkages, Referrals, and Follow-up
- Mental Health, i.e. brief treatment and pre treatment services
# Home Visiting Indicators and Outcomes

<table>
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<tr>
<th>Desired Outcome</th>
<th>Physical and social-emotional health</th>
<th>Parent-Child Level</th>
<th>Parent Level</th>
<th>Family Level</th>
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</thead>
<tbody>
<tr>
<td>Physical and social-emotional health</td>
<td>Child has medical home</td>
<td>Mothers breastfeed for &gt;6 months</td>
<td>Parent has medical home</td>
<td>Home health and safety (e.g., safe sleep, car seat, guns, mold, pests, etc.) increases</td>
</tr>
<tr>
<td></td>
<td>Child has medical, dental insurance</td>
<td>Early and Regular Prenatal Care</td>
<td>Parent has medical, dental insurance</td>
<td>Reduced incidence of intimate partner violence</td>
</tr>
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<td>Immunizations are up-to-date</td>
<td>Improved parenting skills, attitudes, behaviors</td>
<td>Increased knowledge of child development</td>
<td>Family resilience increases</td>
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<tr>
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<td>Well child visits up-to-date</td>
<td>Improved parent-child relationships</td>
<td>Decrease in parental depression</td>
<td>Improved housing security</td>
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<tr>
<td>School readiness</td>
<td>Child receives early developmental screening</td>
<td>Decreased child abuse and neglect</td>
<td>Decrease in ATCD (alcohol, tobacco and other drugs) use</td>
<td>Increased food security</td>
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<td>Increased parent support for child learning and development</td>
<td>Increased social support</td>
<td>Increased economic self-sufficiency</td>
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**Key Indicator Themes:**
- Child Health
- Maternal Health
- Child development/School Readiness
- Child Maltreatment
- Economic Self-sufficiency

Impact

Birth Certificate Data
Why is Birth Certificate Data Important?

1. Program Development and Implementation
2. Grant Applications
3. Monitoring and Evaluation
Example 1: Needs Assessments

- Use data to conduct needs assessment for **strategic program development**, **grant applications**, and **resource allocation**
- State and Federal money
- Focus on:
  - Infant Mortality Rate
  - Fetal Death Rate
  - Low Birth Weight
  - % Medi-Cal Births
Example 2: Black Infant Health (BIH)

- Aims to improve health among African American mothers and babies to reduce Black-White disparities in infant mortality rates, preterm births, and low birth weights
- Client-centered case management to help women develop life skills, learn strategies for reducing stress, and build social support
- Alameda County BIH is a Tier 3 funded program. In order to qualify, a county needs to have between 6,001 and 7,497 African-American births over a three year period
- BIH is located in 15 local health jurisdictions in CA where more than three quarters of African-American live births occur in the entire state
Example 3: Health Advancement for Pacific Islanders (HAPI)

- Population level data from birth certificates showed lower rates of access to early prenatal care and high preterm birth rates among Pacific Islander (PI) women
- Private foundation funds – March of Dimes
- Project focuses on:
  - Outreach to pregnant Pacific Islander women
  - Assisting with access to prenatal care and accompanying them to visits
  - Group activities and support
- Success will be measured by:
  - Change in rates of early prenatal care and preterm birth among PI women
Example 4: Alameda County Healthy Start Initiative (ACHSI)

- Alameda County has been a Healthy Start site for over 25 years
- Addresses the needs of high-risk women and their families before, during, and after pregnancy
- Currently in the 2014-2019 grant cycle
- **Minimum Infant Mortality Rate** required to qualify for Healthy Start grant ($2 million/year)
- Need **race/ethnicity data and geodata** to qualify for HS funds
Birth certificate data used to:

- Identify program successes and challenges
- Compare population level data to participant level data
First Trimester Entry Into Prenatal Care Among African Americans

Percentage of First Trimester Entry into PN care

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<thead>
<tr>
<th>Year</th>
<th>ACHSI</th>
<th>Alameda County</th>
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<tbody>
<tr>
<td>2014</td>
<td>75%</td>
<td>88%</td>
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<tr>
<td>2015</td>
<td>76%</td>
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<td>2016</td>
<td>77%</td>
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ACHSI | Alameda County
Low Birth Weight Among African Americans

Percentage of Low Birth Weights

- **ACHSI, Excluding Special Start**
- **Alameda County**

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<tr>
<th>Year</th>
<th>ACHSI, Excluding Special Start</th>
<th>Alameda County</th>
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<tbody>
<tr>
<td>2014</td>
<td>1%</td>
<td>11.6%</td>
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<tr>
<td>2015</td>
<td>16%</td>
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<tr>
<td>2016</td>
<td>8%</td>
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Preterm Birth Among African Americans

- ACHSI, 2016
- Alameda County, 2014

Percentage of Preterm Births (< 37 weeks gestational age)

- 1%
- 11.1%

Preterm Births
Conclusions: ACPHD Use of Birth Certificate Data

- Accurate birth certificate data is important to home visiting and other core MPCAH Programs, particularly for program development, grant applications, and program evaluations.

- MPCAH relies on inequities by race/ethnic groups to develop cultural and racial competent programs and interventions.

- Birth certificate data is used to study the efficacy of our home visiting programs (E.g. National Healthy Start Evaluation).
ACPHD is committed to working with AC Hospitals on improving birth certificate data quality.

We will continue to monitor birth certificate data quality indicators and produce bi-annual reports.

We will develop and provide educational materials on the importance of birth certificates for pregnant mothers, birth clerks and other audiences as needed.

We will share “smart and successful” strategies with our birthing centers.

We are always available for questions and feedback.

We want AC Hospitals to work with us so that we can be the leader in birth certificate data quality in California.

Keep up the great work so that Every Baby Counts in Alameda County!
Questions

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