Prevention of Preterm Birth
Integrating into Public Health Action

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Public Health Committee, Health Commission
San Francisco Department of Public Health
Update since November 2014 Presentation to Public Health Committee of Health Commission:
Integrating “prevention of preterm birth” into public health action by “Collective Impact”

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<th>Common Agenda</th>
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<td>• Informed and engaged key clinical &amp; community leaders about impact, incidence, and risk factors of PTB</td>
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<th>Shared Measurement</th>
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<td>• Identified incidence of PTB among high-risk populations</td>
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<td>Higher rates of PTB: Medi-Cal, Latinas, African-Americans, Mental Illness, Drug Abuse, Neighborhoods in poverty, SFGH</td>
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<td>• Identified prevalence of risk factors among pregnant women</td>
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<td>Chronic disease, mental health, healthcare access</td>
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<th>Mutually Reinforcing Activities</th>
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<td>• Improve <strong>Social Determinants of Reproductive Health &amp; PTB</strong></td>
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<td>• Develop <strong>Woman-Centered Preconception &amp; Prenatal Care</strong></td>
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<th>Continuous Communications</th>
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<td>• Leveraging opportunities &amp; learning with UCSF Preterm Birth Initiative</td>
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<td>• Considering methods to bolster communications</td>
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<th>Backbone Support</th>
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<td>• Considering options</td>
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<td>Andrea Jackson, MD, MAS</td>
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<td>Audrey Lyndon, PhD, RN, FAAN</td>
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<td>Cheri Pies, MSW, DrPH</td>
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<td>Curtis Chan, MD, MPH</td>
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<td>Cynthia Harper, PhD</td>
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<td>Elizabeth Butrick, MSW, MPH</td>
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<td>Gail Newell, MD, MPH</td>
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<td>Jessica Wolin, MCRP, MPH</td>
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<td>Margaret Handley, PhD</td>
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<td>Margy Hutchison, CNM, MS</td>
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<td>Martha Ryan, NP, MPH</td>
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<td>Melanie Thomas, MD, MS</td>
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<td>Monica McLemore, PhD, RN, MS</td>
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<td>Nicole Santos, PhD</td>
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<td>Pooja Mittal, DO</td>
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<td>Sylvia Guendelman, PhD, MSW</td>
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<td>Tonya Chafee, MD, MPH</td>
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Preterm Birth:

Rates & disparities have not improved in SF

- **Infant Mortality:** Prematurity attributable for 35% of infant deaths\(^{2010}\), more than any other single cause.\(^{\text{CDC}}\)

- **Disability:** Leading cause of long-term neurological disabilities in children.

- **Indicates the health status** of pregnancies, women, children, families, and communities.
Social Determinants of Preterm Birth in San Francisco

Data Source: Stookey, Jodi. CDPH Birth Statistical Master File for San Francisco, 2009-2012
% of Pregnant Women with Chronic Disease & Preterm Birth, by Housing Situation (SF, 2012 Births)

- Standard housing
- Public housing
- SRO
- Transitional/Shelter
- Homeless

Data Source: Stookey, Jodi. CDPH Birth Statistical Master File for San Francisco, 2012
1 in 5 SF women with Medi-Cal coverage are depressed before or after pregnancy.

Data Source: CDPH MIHA Survey, San Francisco County Snapshot, 2010-2011
% Unplanned Pregnancies, among Births by Income Level and Ethnicity, SF 2011-12

- <100% FPL: 59%
- 101-400% FPL: 27%
- 401+% FPL: 18%
- Black: 69%
- Latina: 44%
- Asian: 33%
- White: 18%

Data Source: CDPH MIHA Survey
SFHN provides care to women at-risk for preterm birth

• Jail Health Services
  • 100% reach to vulnerable population

• CBHS Mental Health
  • 4527 children; 9,536 young adults served per year

• CBHS Substance Abuse
  • 447 children; 3,802 young adults

• SFGH Prenatal & Postpartum: 1096 births
  • Medi-Cal ≈ 40% of SF
  • African-Americans ≈ 35% of SF
  • Latinas ≈ 41% of SF
Hospital Rates of Preterm Birth, Singleton Births of SF residents

SFGH = 8.8%

**Prevention of Preterm Birth**

- Preconception care package, especially family planning, education, nutrition and STI prevention, ensuring adolescent friendly services
- Antenatal care package for all women with targeted care of women at risk of preterm birth
- Obstetric care and provider education to promote appropriate induction and caesarean
- Policy support including smoking cessation and employment safeguards of pregnant women

**Management of Preterm Labour**

- Tocolytics to slow down preterm labour
- Antenatal corticosteroids
- Antibiotics for pPROM

**Care of Premature Baby**

- Essential newborn care, especially feeding support and thermal care
- Neonatal resuscitation if needed
- Extra care of premature babies including Kangaroo Mother Care
- Management of premature babies with complications, especially respiratory distress syndrome and infections
- Comprehensive neonatal intensive care, where capacity allows

**Reduction of Preterm Birth**

**Mortality Reduction Among Babies Born Preterm**

Born Too Soon, WHO, 2012
Improving the Social Determinants of Reproductive Health & Preterm Birth

**Strategies:**
1. Partner with key institutions and communities
2. Health Impact Assessment (HIA) of public & institutional policies
3. Policy Development - Health in All Policies, Spectrum of Prevention
4. Implementation (Systems-change, Institutional policy, Public policy)

**Evidence-based Areas:**
- Pregnancy Leave
- Second-Hand Smoke Exposure
- Empowerment of Girls & Young Women
- Family Planning
- Stress of poverty
A. Scale-up indicated evidence-based medical care, particularly in **under-resourced healthcare systems.**

- e.g., LARC in primary care clinics, progesterone in selected hospitals

B. Redesign healthcare system to **increase utilization of preventive care** among highly-stressed women

- ↑ rates of preconception & prenatal visits
- Link health/social service clients → primary care & family planning (mental health, substance addiction, incarceration, housing, poverty,)
- Manage chronic disease, mental health, reproductive health

C. Develop **innovative models of healthcare delivery** for women with increased stress

- Community Health Workers, Centering Pregnancy
- Example: “Early Start” Integrated Model of Substance Abuse Intervention for Pregnant Women
Integrating Frameworks to Implement “Mutually Reinforcing Activities” To Address Complex Public Health Problems

Results Based Accountability

Spectrum of Prevention

- Influencing Policy and Legislation
- Changing Organizational Practices
- Fostering Coalitions and Networks
- Educating Providers
- Promoting Community Education
- Strengthening Individual Knowledge and Skills
Prevent Preterm Birth

Mutually Reinforcing Activities

Influencing Policy and Legislation

Changing Organizational Practices

Fostering Coalitions and Networks

Educating Providers

Promoting Community Education

Strengthening Individual Knowledge and Skills

Family Friendly Work Ordinance SF
Second-hand smoking CA
Social & Racial Inequities

Healthy Mothers Workplace SF
Community Healthcare:
• Preconception care pkg
• Targeted Prenatal Care

Equity in Birth Outcomes
UCSF Preterm Birth Initiative
CPSP Roundtable, Women’s Health Advisory Council

Family planning

STI prevention

Targeted care of women w/ risk
• Primary, behavioral, prenatal care
• Nurse Family Partnership, Home Visit
• WIC, BIH

Simplified Map of SFDPH-MCAH
Integrated Life Course Approach to Address Preterm Birth & 15 Public Health Issues
Population Health & SFHN is planning to:

- ↓ preterm birth among at-risk populations
- Engage cross-sector stakeholders toward improving the social conditions of reproductive health & preterm birth
- Design a preconception care package for adolescents and young women to improve access and utilization
- Target care for pregnant women at increased risk for preterm birth
- Build capacity of community leaders to address PTB policy and programmatic efforts
- Support Collective Impact integrated approach