

# Preterm Birth Initiative (PTBi)

A UCSF-led Research Initiative

Update for Health Commission: Public Health Committee

November 18, 2014

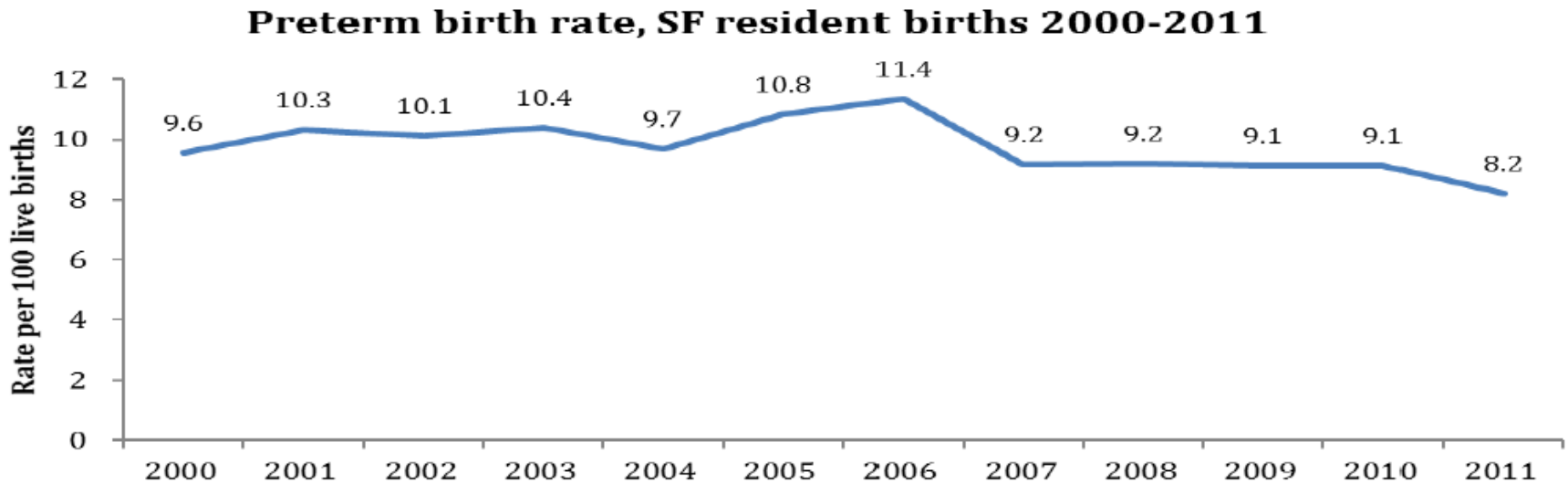
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# Significance

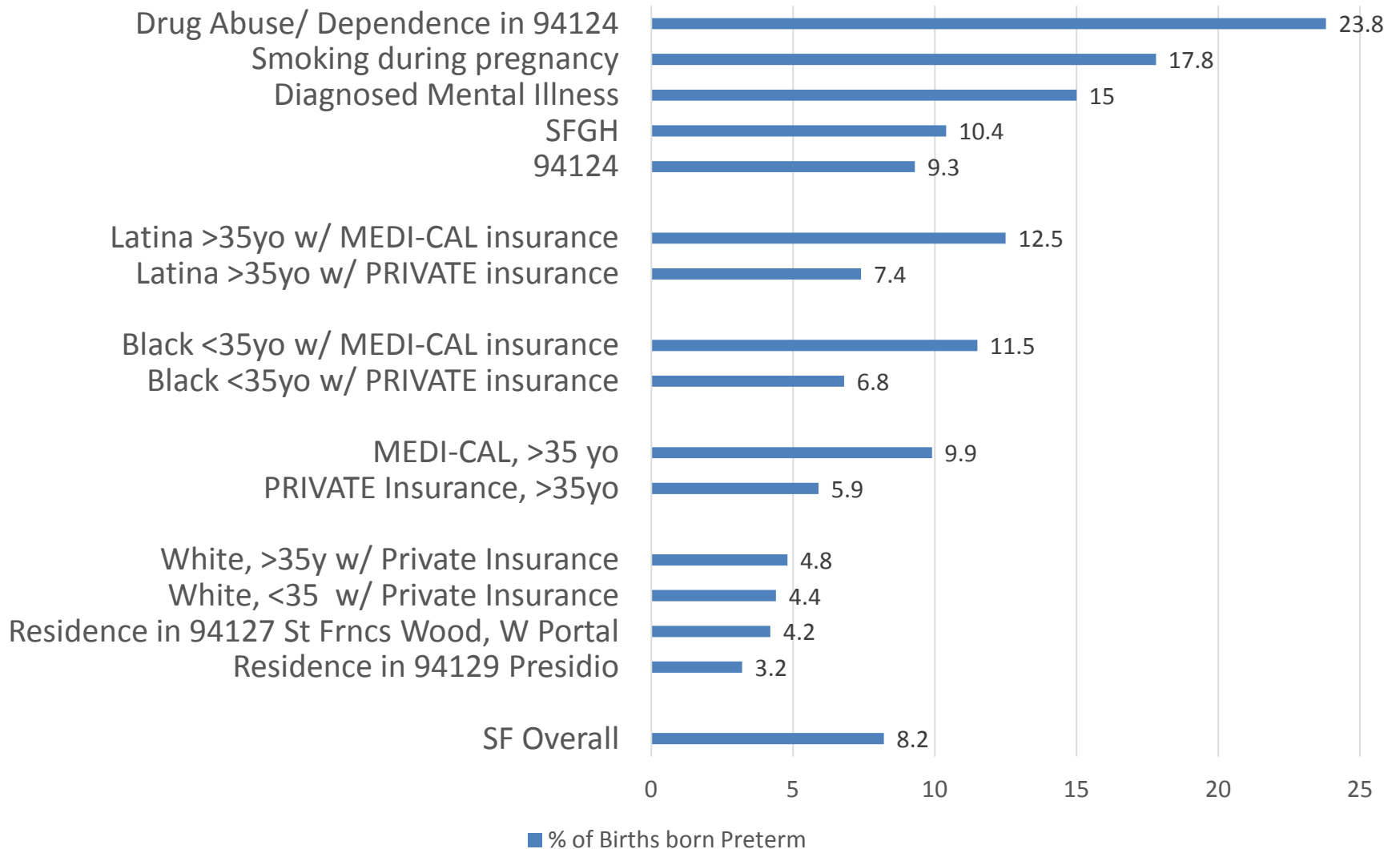
- **Major cause of infant mortality**
  - SF per 1,000: 3.8. White: 2.4; Latino: 4.7; Black: 14.4
- **Lifetime of disabilities**
  - cerebral palsy, chronic lung disease, learning disability, vision/hearing
- **Annual cost of \$26+ billion in U.S.**



# Disparities in Preterm Birth

in San Francisco

## % of Births born Preterm



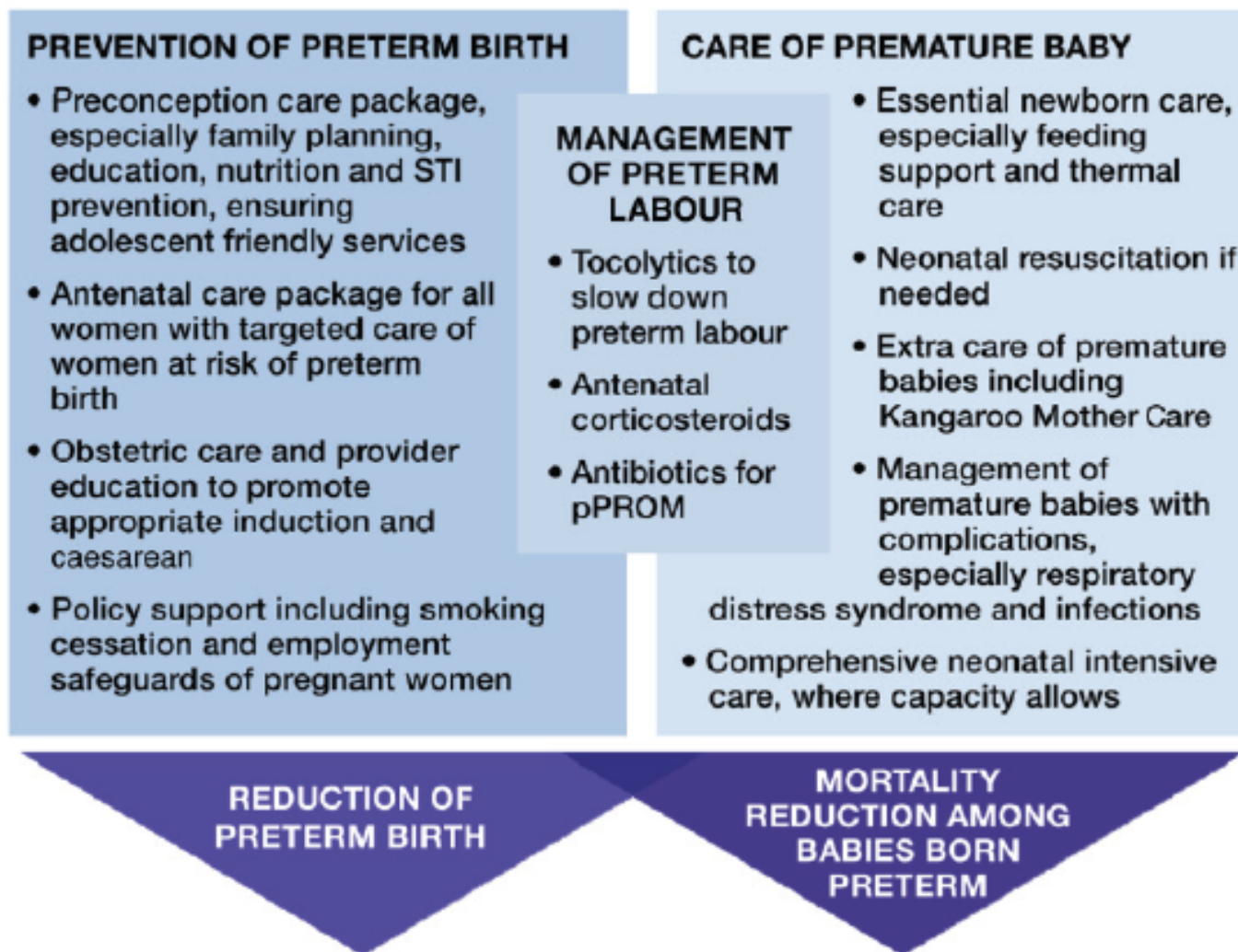
# Factors & Causes of Preterm Birth

Table 3.

<b>Factors of Preterm Birth:</b> (Adapted from IOM Report on Preterm Birth: Causes, Consequences, and Prevention, 2007.)			
<b>Sociodemographic Factors</b>	<b>Psychosocial Factors</b>	<b>Behavioral Influences</b>	<b>Medical &amp; Pregnancy Conditions</b>
<ul style="list-style-type: none"> <li>• <b>Maternal age:</b> U-shaped. &lt;16yo, &gt;35 years old</li> <li>• <b>Marital status:</b> OR: 1.41 single mothers living alone</li> <li>• <b>Race &amp; Ethnicity:</b> Particularly African-Americans</li> <li>• <b>Socioeconomic conditions</b></li> <li>• <b>Neighborhood conditions</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Stress</b></li> <li>• <b>Life events.</b> (divorce, death in family, illness, injury, loss of job)</li> <li>• <b>Chronic stress</b></li> <li>• <b>Anxiety.</b> OR 2.1</li> <li>• <b>Depression.</b> OR 1.96</li> <li>• <b>Racism</b></li> <li>• <b>IPV.</b> OR 1.37</li> <li>• <b>Unintended pregnancy</b> RR 1.62</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tobacco.</b> RR 1.5 for smoking 10-20cig/d; 2.0 for 20+ cig/day</li> <li>• <b>Alcohol.</b> Heavy users of alcohol (e.g., &gt;1 drink/day during pregnancy)</li> <li>• <b>Cocaine users.</b> OR 2</li> <li>• <b>Work conditions.</b> RR=1.3 for work &gt;42 hours/wk, standing &gt;6h/d, low levels of job satisfaction.</li> <li>• <b>Lack of leisure physical activity</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Chronic HTN.</b> OR 4.06</li> <li>• <b>Asthma &amp; Lung Dz</b></li> <li>• <b>Previous PTB</b> OR 2.45</li> <li>• <b>BMI&lt;20</b> OR 3.96</li> <li>• <b>Birth spacing &lt;6m</b> RR 1.3 - 1.6</li> <li>• <b>Infertility treatment</b></li> </ul>

# Evidence-Based Approaches

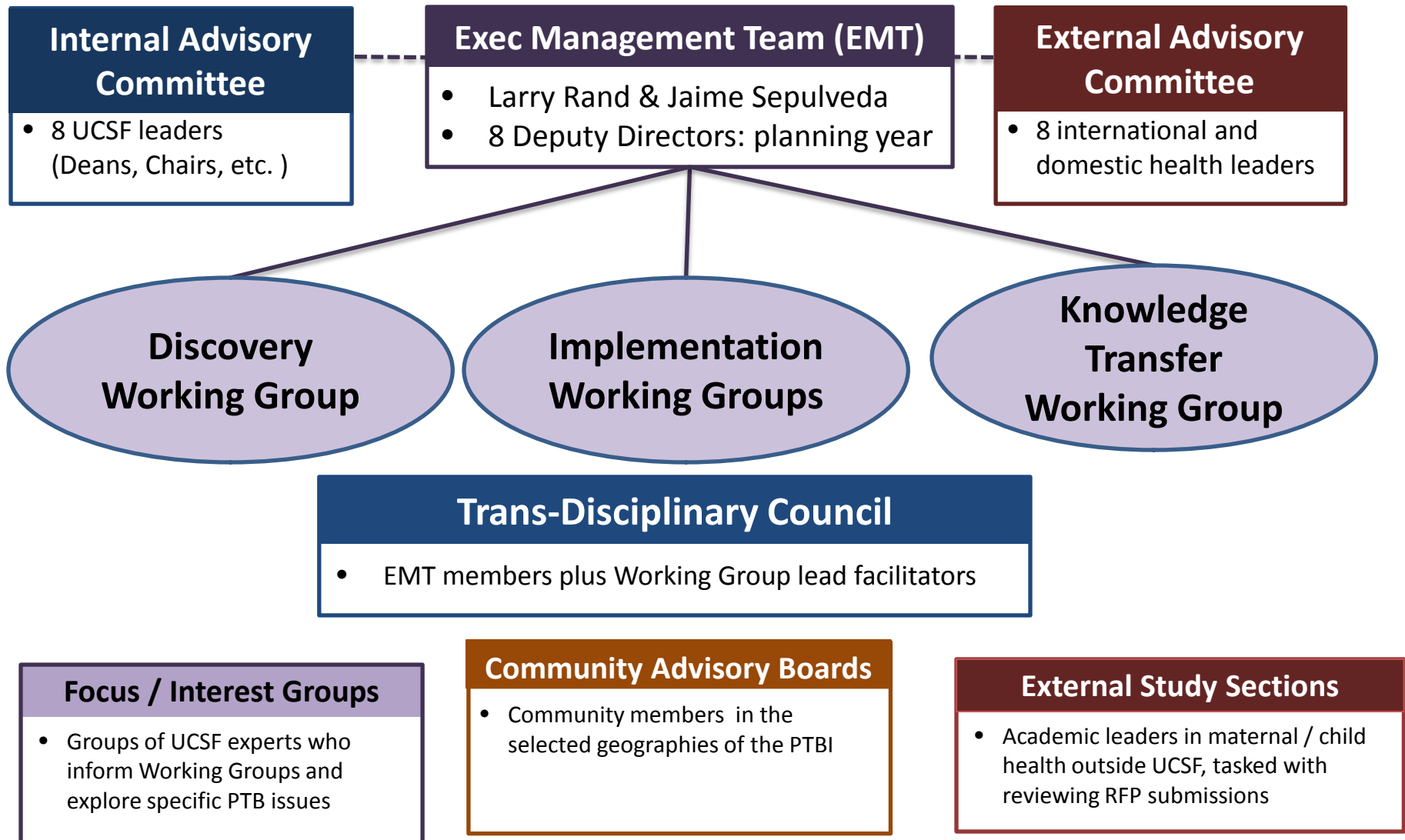
## to Reduce Preterm Birth & Its Morbidity & Mortality



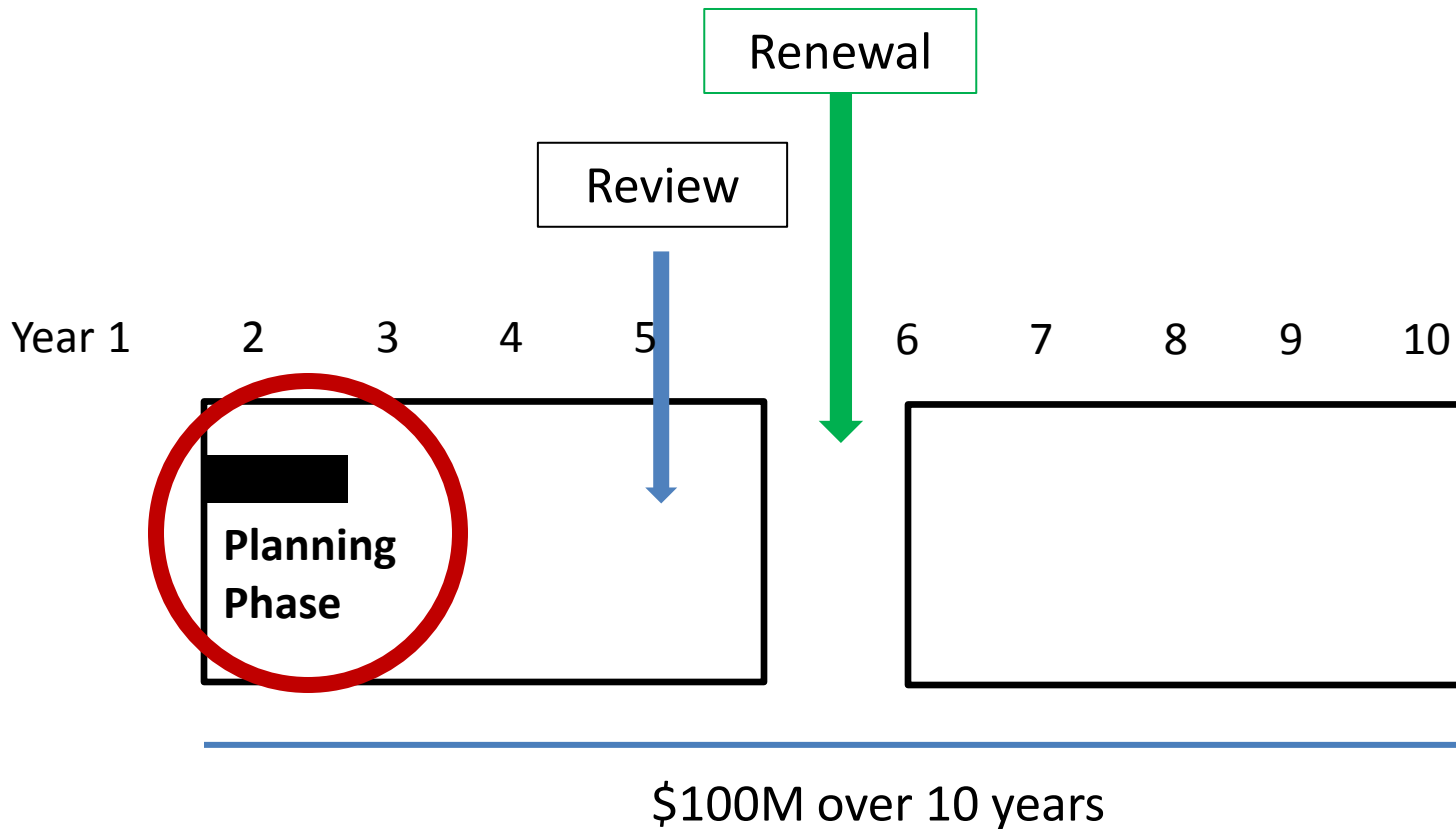
# The Birth of the PTBi

- Co-funded by Marc and Lynne **Benioff** and the **Bill and Melinda Gates Foundation**
  - A research initiative led by UCSF in collaboration with the SFDPH and several global partners
- **3 Aims**
  - **Discovery**
    - Causes, diagnostics, therapeutics)
  - **Implementation**
    - Scaling up what works; understanding barriers
  - **Knowledge Transfer**

# Organization/Structure of the PTBi

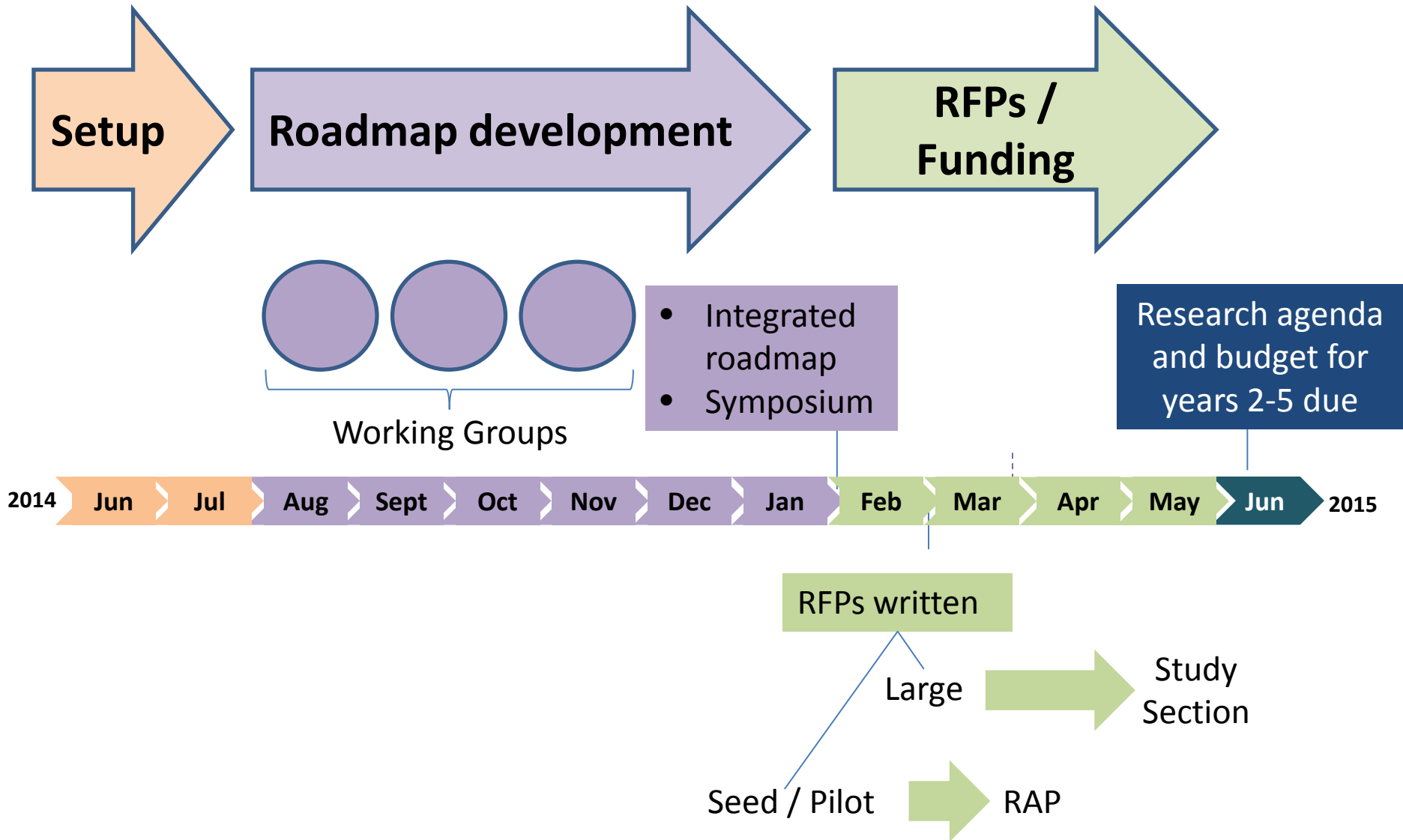


# Ten-Year Overview of the PTBi





# Planning Year Activities and Deliverables



# Role of SFDPH in PTBi

- **Collective Action** to prevent preterm birth:
  - Prenatal care, young women's healthcare, adolescent health, family planning, & social conditions.
  - Headline indicator of Population Health Division Strategic Plan
- **Leadership and innovation** within a significant local and global research effort
- **Stakeholder Engagement**
  - Train community leaders in community-based participatory research