The life course approach to thinking of health care needs and services evolved from research documenting the important role early life events play in shaping an individual’s health path. The relationship of risk and protective factors, such as socioeconomic status, toxic environmental exposures, health behaviors, stress, and nutrition, influence health throughout one’s lifetime. San Francisco is committed to supporting health and wellness throughout the lifespan of its residents. The San Francisco Department of Public Health’s Maternal, Child and Adolescent Health (MCAH) Branch has a mission to promote the health and well-being of women of childbearing age, families, infants, children and adolescents who are at increased risk of adverse health outcomes by virtue of financial, language or cultural barriers, or mental or physical disabilities by ensuring access to health promotion and health care services. MCAH focuses on the most vulnerable children and families and fills what would otherwise be a serious public health gap. MACH assesses the health of the population, and identifies and addresses urgent issues in collaboration with key partners. The work of MCAH is critical to protecting and promoting the health of San Francisco women and children. MCAH aims to reduce health disparities and improve health outcomes by strengthening the public health systems and services that address the root causes of poor health.

Supporting the health and wellness of mothers, children, and adolescents is important because:

- Promoting health in infancy, early childhood, and childhood is the key to lifelong health and wellness, reducing disparities, preventing and minimizing chronic conditions, and ultimately reducing health care costs.
- Prevention and early intervention in women of child bearing age, children, and youth result in proven long-term benefits in school readiness, adult productivity, life expectancy, and cost savings for more intensive services.

The special needs of children and youth with chronic conditions demand specialized policy and program development and progression of disease and disability require services tailored to the specific needs of children, youth, and mothers.

<table>
<thead>
<tr>
<th>Priority Areas for Mother, Child, and Adolescent Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthy Births Outcomes</strong></td>
</tr>
<tr>
<td><strong>Child Well Treatment</strong></td>
</tr>
<tr>
<td><strong>Children’s Oral Health</strong></td>
</tr>
</tbody>
</table>

This Strategic Plan identifies three headline indicators that will be used to measure progress in optimizing the health of mothers, children, and adolescent residents of SF. MCAH leverages clinical and community experience, shared resources, and collaborations to develop upstream policies and systems that improve health and living conditions; and in selecting these priority areas, the life course was taken into consideration.
This page intentionally left blank
For the percent of pre-term and low birth weight infants citywide, rates are improving; however, ethnic and social economic status (SES) disparities are worsening. Going without prenatal care can cause many problems for women and their babies. Studies show that women who do not get prenatal care often have more complicated (and expensive) births. The health department monitors the rates and risk factors of pre-term birth through birth record data. The pre-term rate of specific at-risk groups shows the social disparities, associated risk factors, and opportunities for improvement.

Research has shown that in most cases, pinpointing the exact cause of pre-term birth cannot be identified. Therefore issues connected to early delivery have been looked at to help explain the cause. There are a number of risk factors that may contribute to birthing prematurely; these include smoking, abuse of alcohol, or using drugs (especially cocaine) during pregnancy. Evidence indicates that some psychosocial factors in the cause of preterm birth include major life events, chronic and terrible stress, maternal anxiety, personal racism, and lack of support. Studies have also shown that a collection of healthy lifestyle behaviors are associated with more positive pregnancy outcomes. These may include a healthy diet, plenty of rest, starting prenatal care early, regular checkups, leisure time physical activity, and managing stress level.

Evidence has shown that the following primary prevention for women can improve pregnancy outcomes:
• Public educational interventions – Inform public about potentially avoidable risk factors
• Workplace policies, for example: Minimum duration of paid pregnancy leave of 14 weeks, time off for prenatal visits, release from night shifts, and protection from workplace hazards
• Smoking control and prevention

For decades, medical practice in the United States has steadily improved its clinical management of preterm labor and medical care of premature babies. However, families of lower socioeconomic status are still disproportionately affected by preterm births. In the past decade, increasing understanding about the social, psychological, and behavioral factors of preterm labor have led to logical and evidence-based interventions that address inequities in living and working conditions, stress, and access to healthcare.

WHAT WORKS
Preconception care services for the prevention of preterm birth for all women:
• Prevent pregnancy in adolescence
• Prevent unintended pregnancies and promote birth spacing and planned pregnancies
• Optimize pre-pregnancy weight
• Promote healthy nutrition including supplementation/fortification of essential foods with micronutrients
• Promote vaccination of children and adolescents

Preconception care services for women with special risk factors that increase the risk for preterm birth:
• Screen for, diagnose and manage mental health disorders and prevent intimate partner violence
• Prevent and treat sexually transmitted infections (STIs), including HIV/AIDS
• Promote cessation of tobacco use and restrict exposure to secondhand smoke
• Screen for, diagnose and manage chronic diseases, including diabetes and hypertension

PARTNERS
• Health Plans
• Prenatal care and obstetrics
• Primary care & Family Planning
• San Francisco Unified School District
• CBOs serving Transitional Age Youth, Adolescents
• Governmental agencies serving women and children, including Human Service Agency, Housing Authority, First 5, DCYF, Office of Economic and Workforce Development
• CBHS, Mental Health, and Substance Use Prevention Services

STRATEGIES
• Increase utilization of preconception care for young women, particularly those experiencing high-risk exposures
• Develop citywide plan to improve young women's health in San Francisco
• Integrate pre-conception health message and services into activities
Headline Indicator: Rate of substantiated child maltreatment

BASELINE CURVE

Rate of Substantiated Child Maltreatment for San Francisco Children, age 0-17 years, 2000-2013

THE STORY BEHIND THE BASELINE

The San Francisco rate of substantiated child maltreatment moved in a positive direction over the past 14 years, decreasing from 11.2 to 5.5 cases per 1,000 children aged 0-17 years. The rate declined minimally during the decade from 2000 to 2009, dropped substantially over the next two years, and stagnated between 2011 and 2013. Racial–ethnic disparities in the rate worsened over the time period under review. In 2013, Asian children had the lowest rate (1.7); White children had the second lowest (2.6); Latino children had a rate over three times that of Whites (9.6); and Black children had a rate over 16 times that of Whites (32.9). Approximately 800 San Francisco children aged 0-17 remain in out of home placements in 2014.

Child maltreatment causes suffering to children and families and can have long-term consequences. Maltreatment causes stress that is associated with disruption in early brain development. Extreme stress can impair the development of the nervous and immune systems. Consequently, as adults, maltreated children are at increased risk for behavioral, physical and mental health problems such as: perpetrating or being a victim of violence; depression; smoking; obesity; high-risk sexual behaviors; unintended pregnancy; and alcohol and drug misuse. These risk factors can lead to long term health issues such as heart disease, cancer, suicide and sexually transmitted infections.
The health department partners with the city’s Human Services Agency (HSA) which implemented significant improvements in the 2000’s that came before the reduction in rates seen after 2009. The policy and program changes are described below:

- HSA instituted a process in which it divided the reporting of child abuse and neglect by risk level. Children reported at high or moderate risk are addressed directly by HSA. Children reported at lower risk where HSA does not open a case, are referred to community organizations (CBO’s) for family support services to help reduce the future risk of a report.

- HSA standardized the family assessment of risk and safety. When children are assessed as being at lower risk, they are more likely to be left in the care of their families because of confidence in the results of the assessment.

In addition, several years ago, City funders required that Family Resource Centers and other community programs offering parent education to transition to an evidence-based curriculum. The health department’s Community Behavioral Health section administers the Parent Training Institute, which administers parent education classes, and implements an evaluation of program impact.

**WHAT WORKS**

- Effective programs aimed at prevention of child maltreatment include family support, such as parent education and skills training, home visiting, or similar services
- Strengthening parent-child relationships through education about child development, communication and discipline
- Provision of social support to reduce stress and offer models of stable family life
- Treating parents with mental health or substance abuse problems
- The Departments of Public Health and Human Services recommends:
  - Parenting education, support groups, and family strengthening programs
  - Home visiting to pregnant women and families with infants, e.g., Nurse Family Partnership
  - Respite care for families that have children with special health care needs
  - Family Resource Centers
  - Behavioral health services for parents with mental health and substance abuse problems

**PARTNERS**

- San Francisco Human Services Agency, Mayor’s Office of Housing
- Behavioral Health Services, Public Health Nursing
- Community Based Organizations
- Community members

**STRATEGIES**

- Promote safe, stable, and nurturing relationships and environments for children and families.
- Improve the social environment for young families to reduce stressful circumstances
- Ensure cultural and linguistic relevance of family support activities
Oral health is essential to overall health. Children with untreated cavities (cavities) experience pain, dysfunction, school absences, difficulty concentrating, and low self-esteem—problems that affect a child's quality of life and ability to succeed. Although almost entirely preventable, dental caries is the most common chronic disease affecting children. This is evident in San Francisco with 34% of children having experienced dental decay by the time they entered kindergarten and 22% with untreated caries in public schools. Low-income and minority populations are affected disproportionately by caries, both caries experience and untreated decay.

In San Francisco, 13.3% of children live in poverty. These children face significant barriers in accessing healthcare and have higher rates of dental decay. In the lowest-income schools in San Francisco (those with 100% of children eligible for free or reduced meals), over 40% of children have dental decay. And although all low-income children who qualify for Medi-Cal (California’s Medicaid program) also receive dental benefits through Denti-Cal, these services are greatly underutilized. From 2011-2012, over half of Denti-Cal eligible children in San Francisco did not see a dentist.

Most San Francisco residents living in poverty also belong to racial and ethnic minorities, another factor leading to oral health disparities. Black, Latino, and Asian families experience higher levels of poverty than White residents and also experience far greater rates of dental decay. In San Francisco, only 9.5% of White residents are living below the federal poverty level (FPL), while 29.7% of Blacks, 16.6% of Latinos, and 12.9% of Asians are below the FPL. In San Francisco, 16% of White kindergarten children have experienced caries, compared to 38%
37%, and 43% of Black, Latino, and Chinese children, respectively. In particular, rates of caries have been shown to be drastically higher in areas of San Francisco with high concentrations of immigrant populations, especially Chinatown. Because prevention is the most cost effective strategy to reduce dental disease, most dental public health experts emphasize the impact of primary prevention. If our prevention efforts are successful, caries experience should decrease.

Gaps to address:
- More than half of children and youth do not see a dentist annually
- Disparities in Denti-Cal utilization by income, which is reflected in ethnicity and neighborhood
- Low utilization of dental sealants
- Systematic targeted education during the perinatal period is not taking place
- Many private dentists do not accept the 0-3 year old children

Challenges:
- Denti-Cal reimbursement was reduced by 10%, causing the local pool of Medi-Cal dentists to drop
- Safety Net Dental Clinics are short staffed and cannot meet demand
- Medi-Cal Fluoride Varnish benefit is being provided in only a handful of clinics
- Oral health screening and referral follow-up is voluntary in SFUSD schools
- Denti-Cal utilization is low due to:
  - Lack of access to dentists and long wait times for appointments
  - Dental care is seen as a low priority
  - Parents’ health status and stress levels influence their trust in and use of health care services

WHAT WORKS
- Dental care, including fluoride treatments, and dental sealants, has been proven to prevent tooth decay; treatments offered in both dental, medical and school settings
- Access to Dental Care: Promoting age 1 dental visit; increase Denti-Cal utilization
- Community wide promotion of oral health education; reach parents early, often using varying modalities
- The co-location of school based dental services
- Annual oral health screenings for low-income children enrolled in subsidized child care centers
- Programs to systematically increase tooth brushing in some child care
- Intensive, multi-lingual, team case management
- Universal health insurance for low income children (Denti-Cal and Healthy Kids)

PARTNERS
- San Francisco Dental Society
- San Francisco Unified School District
- San Francisco Dental Hygiene
- San Francisco Child Health & Disability Prevention (CHDP) Program
- University Dental Schools
- Pre-school agencies
- Children’s Medical Service
- Native American Health Center Dental Clinic

STRATEGIES
- Start upstream and Integrate oral health with medical health:
  - Provide outreach and education to families on the availability and importance of oral health services for young children
  - Increase the number of dentists that accept Denti-Cal patient