

Chapter 6

MATERNAL, CHILD, AND ADOLESCENT HEALTH

The health of mothers, infants, and children is important, both as an indicator of population health and as a predictor of the next generation's health. Traditional maternal and child health (MCH) indicators include those that affect pregnant and postpartum women, as well as the health and survival of their infants and children. Increasingly, there is recognition that the general health status of women even before pregnancy has an impact on birth outcomes. This means that in order to influence problem areas, such as low birth weight, where there has been little or no improvement, broader women's health issues need to be addressed. At the heart of most such issues lie the root causes of health inequities discussed in Chapter 2 of this report: income, education and other social and environmental inequities. This section covers some core MCH indicators: infant mortality, low birth weight, prenatal care, births to teenagers, immunizations, and dental health.

Characteristics of Live Births

The average number of births in Alameda County was 21,758 births per year from 2001 to 2003. The birth rate has decreased from 18.3 per 1000 people in 1990 to 14.4 in 2003. Native Hawaiians/Other Pacific Islanders (NHOPI) had the highest birth rate (22.4 per 1,000 people) followed closely by Latinos (21.1). Because the NHOPI population is much smaller than the Latino population, the actual number of births per year among NHOPIs is very small (239) compared to Latinos (6,422).

For the period of 2001 to 2003, nearly 30% of all births were to Latinas; 28% were to Whites, 25% to Asians, and 13% to African Americans. A majority of births (73%) were to mothers 20 to 34 years of age. Under 7% were to mothers 19 years and younger while 20% were to those 35 years and older. Eighty percent of mothers giving birth had 12 or more years of education. Twenty-eight percent of women who gave birth were covered by Medi-Cal.

In 2003, over half (52%) of the births were to foreign-born mothers. Ninety percent of Asian mothers were foreign born, 71% of Latina mothers, 57% of NHOPI mothers, 18% of White mothers and 9% of African American mothers.

Table 6.1: Select Characteristics of Live Births to Alameda County Residents, 2001-2003

		Average Number of Births	%	Crude Birth Rate*
Birth Rate by Year	1990	23,315	-	18.3
	1995	20,441	-	15.1
	2000	22,146	-	15.3
	2001	21,993	-	14.9
	2002	21,754	-	14.6
	2003	21,528	-	14.4
Race/Ethnicity of Mother	African American	2,858	13.1%	13.8
	American Indian	79	0.4%	9.2
	Asian	5,514	25.3%	16.1
	Latina	6,422	29.5%	21.1
	Multiple Race	317	1.5%	6.9
	NHOPI**	239	1.1%	22.4
	White	6,004	27.6%	10.6
	Other/Unknown/Withheld	324	1.5%	-
Age of Mother (Years)	14 and younger	24	0.1%	-
	15-19	1,416	6.5%	-
	20-34	15,888	73.0%	-
	35 and older	4,429	20.4%	-
Mother ≥12 yrs Education		16,798	80.6%	-
Medi-Cal Delivery		6,124	28.1%	-

Note: Average annual number of births 2001-2003=21,758; average annual birth rate=14.6 per 1,000

Source: CAPE; Alameda County vital statistics files, Census 2000, DOF.

* Birth rates are per 1,000 population.

**NHOPI: Native Hawaiian and other Pacific Islander

Infant Mortality

What is it?

Infant mortality is the death of a child less than one year of age. The infant mortality rate is the number of deaths of children less than one year old per 1,000 live births.

Why is it important?

Infant mortality is an important indicator of the health status of a community. It signifies the general health status of new mothers and their ability to access prenatal care.

One of the great public health successes has been the dramatic decrease (97% since 1915) in infant mortality rates.¹ In no other area has mortality decreased by this much in the last hundred years. However, the persistent challenge in infant mortality remains the inequities by race/ethnicity. African American infants continue to be more than two times more likely to die before their first birthday than White infants.²

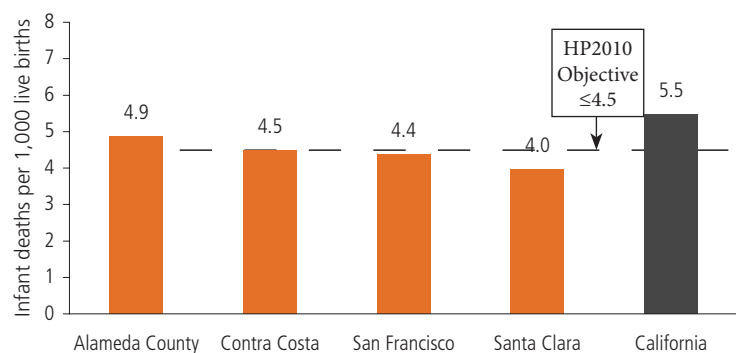
The reasons for these differences in birth outcomes are complicated. Some of the differences have been explained by differences in income, the effects of racism and stress levels. Other research has suggested that answers will be found in the study of women's health and risk factors throughout her life span and not just during pregnancy. This body of research suggests that a series of events affect African American and White women differently throughout their lives that affect not only their overall health but their reproductive health as well.³

Other risks associated with infant mortality are substance abuse by the mother, young age of mother (less than 17 years), preterm birth, low birth weight, exposure to second hand smoke, inadequate prenatal care, and infections and other complications during pregnancy.

What is Alameda County's status?

The infant mortality rate in Alameda County was slightly lower than that in California and higher than in neighboring counties. However, these differences were not statistically significant. Only Santa Clara's rate was significantly lower than California's. While Alameda County has not yet met the HP2010 objective of 4.5 or fewer infant deaths per 1,000 live births, the three neighboring counties have.

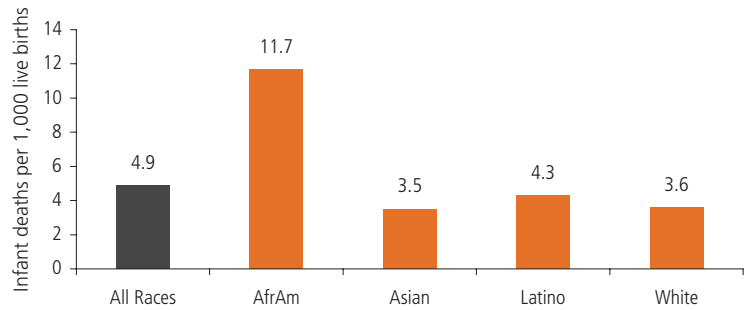
Figure 6.1: Infant Mortality Rate, Selected Counties and California, 2000-2002



Source: CAPE; CADHS, County Health Status Profiles, 2005.

The infant mortality rate among African Americans was two to three times higher than among other race/ethnic groups and the county as a whole. The African American rate also exceeded the HP2010 objective of 4.5 or fewer infant deaths per 1,000 live births by a similar margin.

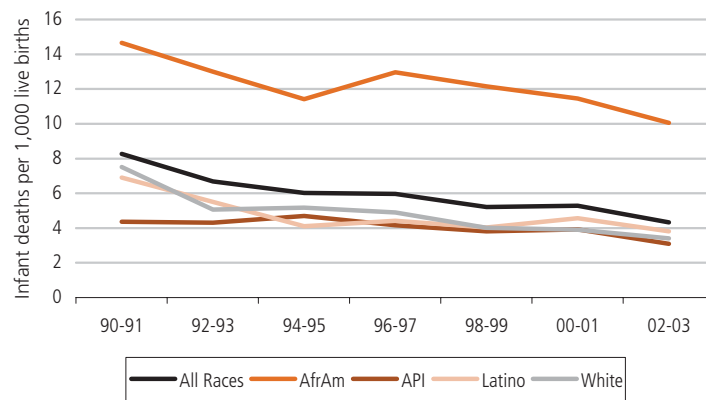
Figure 6.2: Infant Mortality by Race/Ethnicity, Alameda County, 2001-2003



Source: CAPE; Alameda County vital statistics files 2001-2003, CA DOF.

The infant mortality rate has declined over the last decade in Alameda County as it has in California. Rates declined in every race/ethnic group, though the decrease was not statistically significant for African Americans or for APIs. The African American rate remained significantly higher than any other race/ethnic group. Throughout the period, the African American rate was 1.5 to 2.5 times higher than the county rate.

Figure 6.3: Infant Mortality by Race/Ethnicity, Alameda County, 1990-2003



Source: CAPE; Alameda County vital statistics files 1990-2003, CA DOF.

Low Birth Weight

What is it?

Infants weighing less than 2,500 grams (5 lbs 8 oz) at birth are considered low birth weight (LBW).

Why is it important?

Achieving a healthy weight is crucial for a newborn's survival. Low birth weight is the most common cause of death during the neonatal period, the first 28 days of life. Thus, improvements in infant birth weight can contribute substantially to reducing infant mortality. In addition, low birth weight infants who survive their first year are at increased risk of long-term physical and developmental complications than are infants of normal birth weight.

In the past decade, infant mortality has declined largely due to improved survival rates of LBW infants, not to a decrease in the number of LBW infants.⁴ Nationally, LBW rates have slowly increased over time, partially because of an increase of multiple births. In 2003, the nationwide percentage of LBW infants was its highest in three decades at 7.9%.⁵

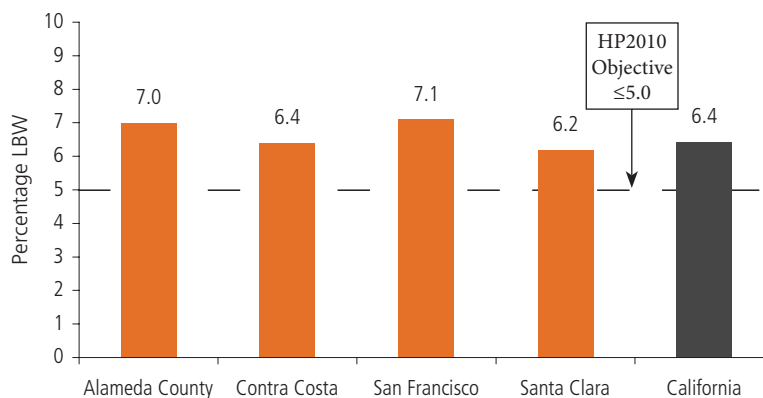
An additional area of concern is that no progress has been made in decreasing racial inequities in LBW infants. LBW rates are two times higher for African Americans than for Whites. The reasons for this inequity are complex and are not entirely understood.

Many factors increase the risk of low weight at birth. Some of the most important factors are pre-term delivery, maternal smoking and illicit drug use, poor maternal nutrition, young maternal age, low maternal educational attainment, low family income, late or no prenatal care, and pregnancy-associated hypertension.^{5,6} Emerging research also suggests that cumulative stress, racism, and maternal infections may also affect the weight of babies.³ Of all infants that are LBW, the smallest—those weighing less than 1,500 grams—are at the highest risk of dying in their first year of life.

What is Alameda County's status?

Seven percent of Alameda County births were low birth weight, or an average of 1,522 births per year. Alameda County had the seventh highest rate among California's 58 counties. Currently, neither Alameda County nor its neighboring counties met the HP2010 objective of 5% or less.

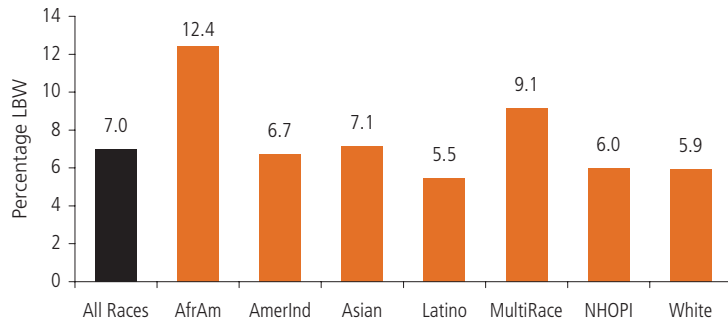
Figure 6.4: Low Birth Weight, Selected Counties and California, 2001-2003



Source: CAPE; CADHS, County Health Status Profiles, 2005.

African Americans in Alameda County had the highest rate of LBW, nearly 80% higher than the county average. The rate of LBW among those of two or more races also exceeded the rate of other race/ethnic groups. Latinos have the lowest rate. No race/ethnic group has met the HP2010 objective of 5% or less.

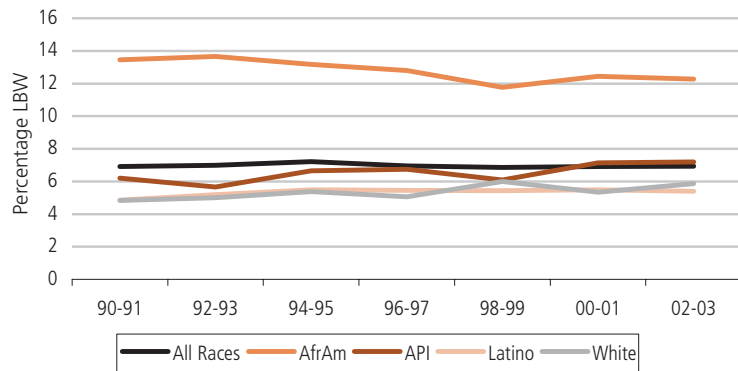
Figure 6.5: Low Birth Weight by Race/Ethnicity, Alameda County, 2001-2003



Source: CAPE; Alameda County vital statistics files 2001-2003.

During the last decade, the percentage of low birth weight babies in Alameda County has remained approximately 7% while rates nationally have increased. However, there are racial/ethnic differences in these patterns. Rates of LBW among Whites and APIs increased over the decade by a percentage point, while the African American rate declined by more than one percentage point. The Latino rate remained stable. While the African American rate declined slightly over the period, it continues to exceed those of other race/ethnic groups by wide margins.

Figure 6.6: Low Birth Weight by Race/Ethnicity, Alameda County, 1990-2003



Source: CAPE; Alameda County vital statistics files 1990-2003.

Prenatal Care

What is it?

Prenatal care refers to pregnancy-related health care provided to a woman during pregnancy. It is recommended that a woman start receiving prenatal care in the first trimester (first three months) of her pregnancy.

Why is it important?

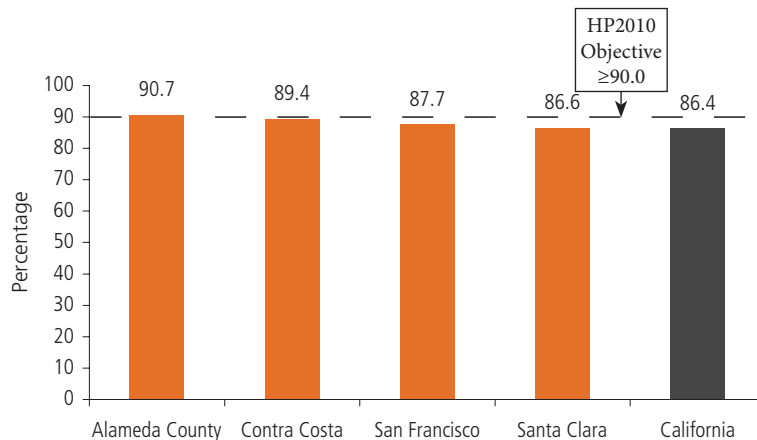
The use of timely, high-quality prenatal care can help prevent poor birth outcomes by identifying treatable medical conditions, such as hypertension and sexually transmitted diseases, which may endanger the mother and/or fetus. Entry into prenatal care also provides an opportunity for education and intervention around diet and exercise, in addition to behavioral risks such as alcohol, tobacco, and other drug use. While prenatal care is important, it alone is not sufficient to ensure healthy birth outcomes. In the last decade, while first trimester prenatal care has increased in Alameda County and in the state, it has not been sufficient to improve low birth weight rates.

Risk factors for late entry into prenatal care include lack of culturally appropriate pregnancy testing sites, pregnancy at a young age, less than a high school education, and having had a large number of children. Domestic violence, cultural beliefs, drug abuse, single parenthood, and poverty may also prevent women from receiving timely prenatal care.⁶

What is Alameda County's status?

Ninety-one percent of pregnant women in Alameda County began prenatal care during their first trimester of pregnancy. Alameda County had the fourth highest rate of early prenatal care among California's 58 counties, and it has met the HP2010 objective of at least 90%. It was the only one of the neighboring counties to have done so. Thus far, the relatively high rate of prenatal care in Alameda County has had little impact on the rate of low birth weight.

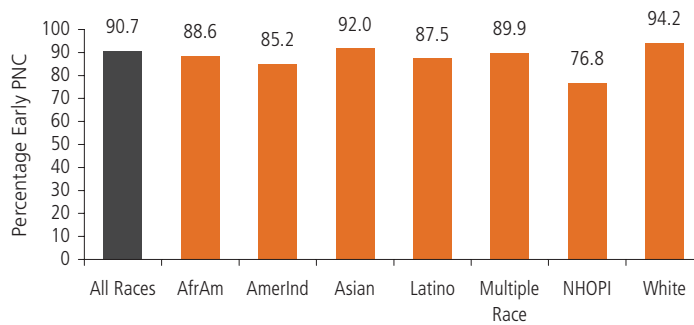
Figure 6.7: Early Prenatal Care, Selected Counties and California, 2001-2003



Source: CAPE; CADHS, County Health Status Profiles, 2005.

Whites and Asians had the highest rates of prenatal care and were the only two race/ethnic groups to have met the HP2010 objective of at least 90%, though other groups were very close. Native Hawaiian and other Pacific Islanders (NHOPI) had notably lower rates of early prenatal care (76.8%).

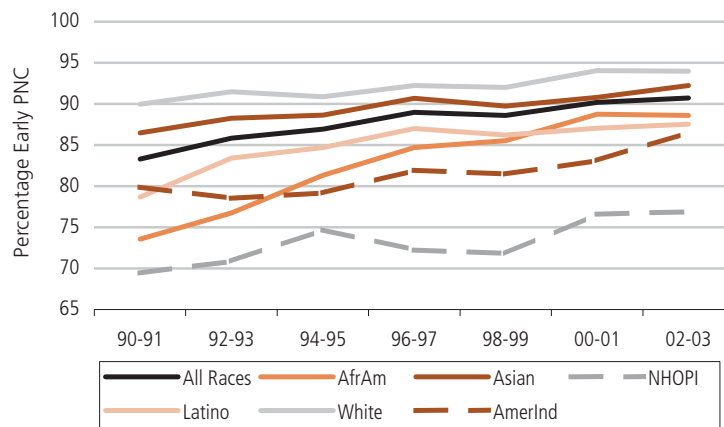
Figure 6.8: Early Prenatal Care by Race/Ethnicity, Alameda County, 2001-2003



Source: CAPE; Alameda County vital statistics files 2001-2003.

During the past decade, the percentage of women seeking early prenatal care increased in every race/ethnic group in Alameda County. The differences between groups were smaller in 2002-03 than they were in 1990-91. The largest gains were made by African Americans (17 percentage points), NHOPIs (12 percentage points), and Latinos (10 percentage points). Rates of early prenatal care among NHOPIs continue to fall well below other groups at only 77% in the most recent period.

Figure 6.9: Early Prenatal Care by Race/Ethnicity, Alameda County, 1990-2003



Source: CAPE; Alameda County vital statistics files 1990-2003.

Teenage Births

What is it?

The teen birth rate is defined as the number of live births to mothers aged 15-19 years per 1,000 females 15-19 years of age in the population. The percentage of teen births is defined as the number of births to mothers aged 15-19 years per 100 live births. The number of teen births is not the same as the number of teen pregnancies. It is estimated that 50% of teen pregnancies end in birth, 36% in abortion and 14% in miscarriage.⁷ Thus, the teen pregnancy rate may be twice the teen birth rate.

Why is it important?

Teen mothers typically have more difficulty completing their education, have fewer employment opportunities, and are more likely to require public assistance and to live in poverty than their peers. They also are at high risk for poor birth outcomes and for having another pregnancy while still in their teens. Infants born to teen mothers are at greater risk of child abuse, neglect, and behavioral and educational problems at later stages.

Adolescence is a time of increased vulnerability to social influences, which may seriously compromise the health of young people. This time is characterized by experimentation, risk-taking, and an increased dependence on peers. Youth are at significant risk for unplanned pregnancies and sexually transmitted diseases.⁸ Unintended pregnancies are serious and costly. With an unwanted pregnancy, a teenager is less likely to seek prenatal care in the first trimester, and is more likely to expose the fetus to harmful substances such as tobacco or alcohol.

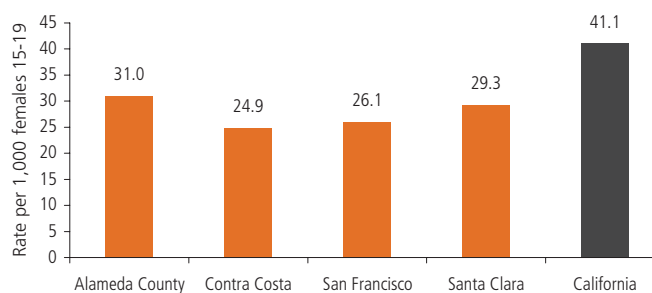
Nationally, the birth rate for U.S. teenagers declined for the twelfth consecutive year in a row from 62.1 births per 1,000 females 15-19 years in 1991 to 41.7 in 2003.⁵ In fact, the decline in teen birth rates during the last decade was seen in every state in the nation and for every racial and ethnic group.

Many factors increase the risk for teen pregnancy. Among the most important are poor access to birth control and health care in general, low income, lack of financial and emotional support, lack of education, lack of positive role models, unsatisfactory adult relationships, lack of after-school and community activities, substance abuse, and low self-esteem.⁸

What is Alameda County's status?

The teen birth rate in Alameda County was 31.0 per 1,000 females aged 15-19 years. This rate was higher than those in neighboring counties but substantially lower than California's rate of 41.1. There is no HP2010 objective for teen birth rates.

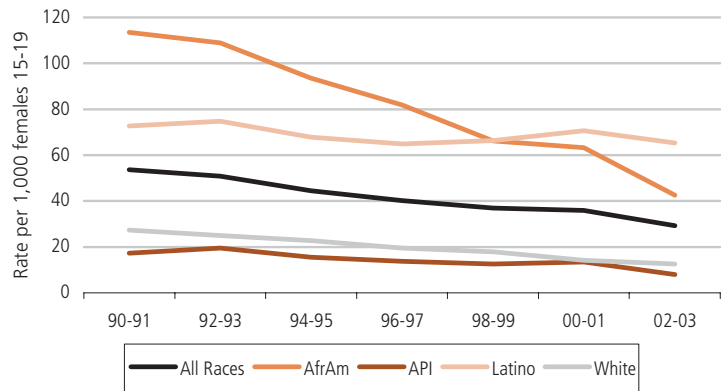
Figure 6.10: Teen Births, Selected Counties and California, 2001-2003



Source: CAPE; CADHS, County Health Status Profiles, 2005.

Reflecting state and national trends, the teen birth rate in Alameda County has declined steadily since 1990. With the exception of Latinas, all race/ethnic groups in Alameda County have seen marked improvements. The slight decline in the Latina rate in the county was not statistically significant and did not follow the declines observed at both the state and national levels. The decline among African Americans has been dramatic (64%), with the rate dropping below the Latina rate since 1998.

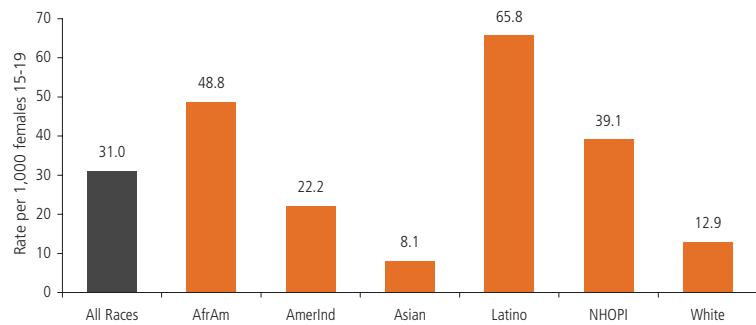
Figure 6.11: Teen Births by Race/Ethnicity, Alameda County, 1990-2003



Source: CAPE; Alameda County vital statistics files 1990-2003, CA DOF.

In Alameda County, Latinas had the highest teen birth followed by African Americans and NHOPIs. The Latina rate is eight times higher than the Asian rate and five times higher than rates among Whites.

Figure 6.12: Teen Births by Race/Ethnicity, Alameda County, 2001-2003

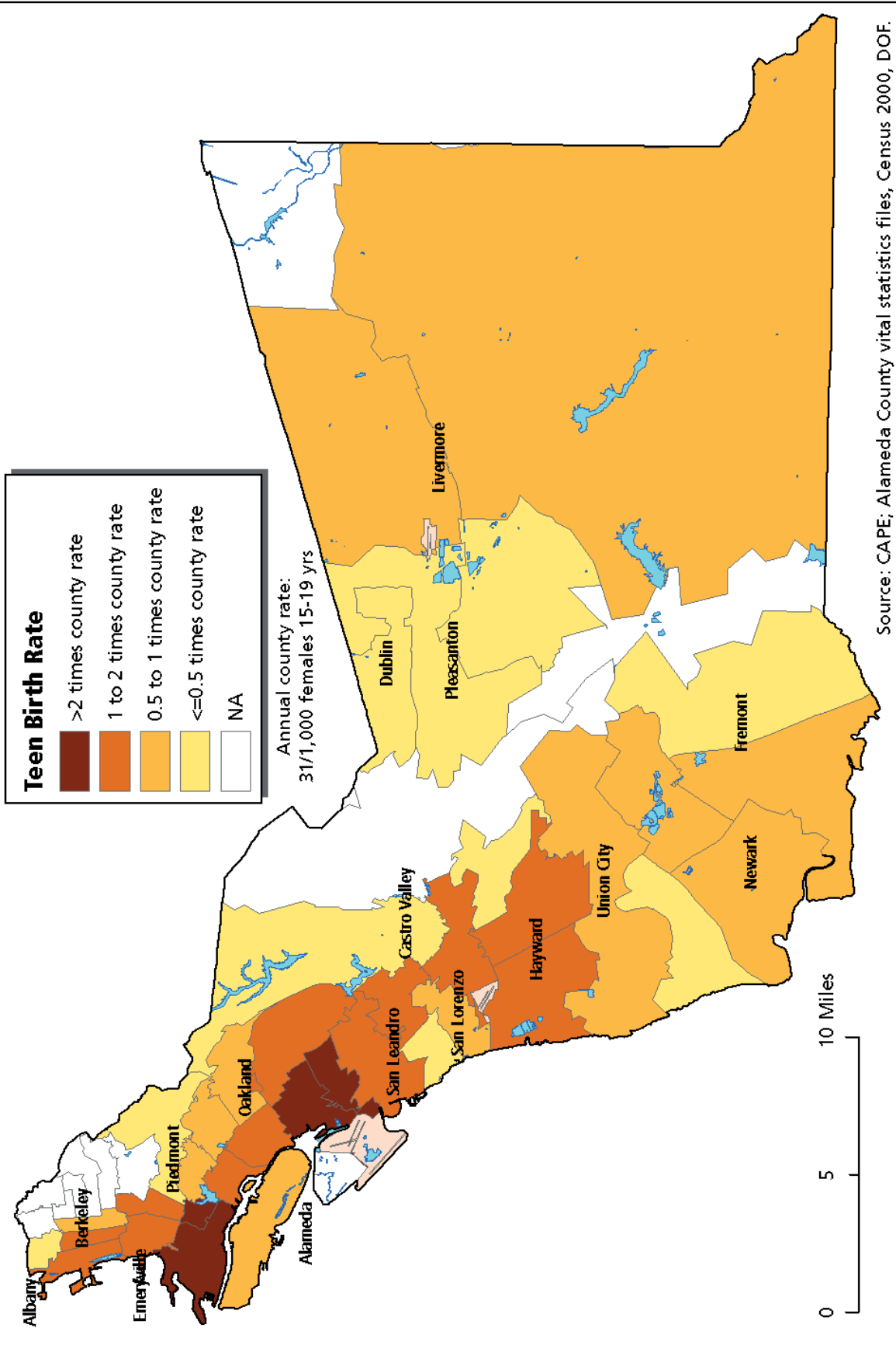


Source: CAPE; Alameda County vital statistics files 2001-2003, CA DOF.

Map 6: Teen Birth Rates

The highest rates of teen birth are in East and West Oakland. Teen birth rates in these areas are over twice the county rate of 31 births per 1,000 females aged 15-19 years. Albany, Castro Valley, Dublin, Fremont, Piedmont, and Pleasanton have teen birth rates that are well below the county average. Between 2001 and 2003, there were 1,416 births to teen mothers in Alameda County which represented 6.5% of all births.

Map 6: Teen Births, Alameda County, 2001-2003



Childhood Immunization

What is it?

Immunizations are given to children to protect them from serious infectious diseases. California requires that children be up-to-date on their shots before enrolling in licensed child-care programs, kindergarten, and seventh grade.

Why is it important?

The reduction in incidence of infectious diseases is the most significant public health achievement of the past 100 years, and vaccination has played a key role in this progress. Immunization continues to be an important safe guard for child health. It is one of the safest and most effective preventive measures ever known. However, many infants do not start immunizations on time or complete the entire series.

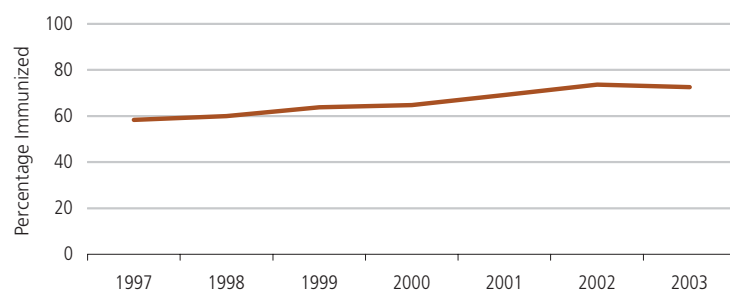
Vaccines are the first-line of defense against diseases such as polio, measles, pertussis and hepatitis. These biological substances cause the immune system to produce an immune response that is very similar to that produced by the natural infection, yet does not subject a person to “full blown” disease or complications. Vaccines not only protect the immunized individual, but the community as well. When immunization levels in a community are high, the few who cannot be vaccinated are protected because they are surrounded by immune people, thus their risk of exposure to disease is low. This phenomenon is called herd immunity.

Each year, the Immunization Branch of the State Department of Health Services conducts a survey of kindergartens within each county throughout the state. This survey is called the Kindergarten Retrospective Survey. It uses immunization records of kindergarten students at age five to estimate the percent of children who were up-to-date when they were two years old. Therefore, the 2003 retrospective survey of kindergarten students at age five is in fact estimating the immunization levels among two year-olds in 2000.

What is Alameda County’s status?

According to estimates from the 2003 Kindergarten Retrospective Survey, 73% of Alameda County children were fully up-to-date on their immunizations by two years of age. This was similar to the statewide immunization rate of 71%, but is well below the HP2010 objective of at least 90%. The immunization rate in the larger Bay Area was the same as Alameda County. Though the percentage of fully immunized children improved since 1997, it has leveled off in the last year.

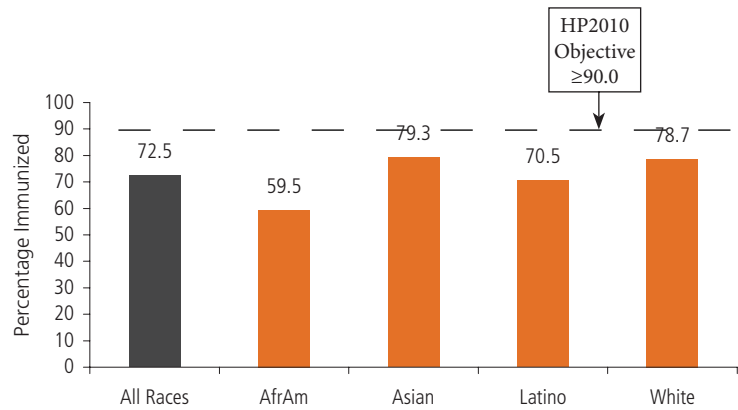
Figure 6.13: Child Immunization Rates, Alameda County, 1997-2003



Source: CAPE; Alameda County Kindergarten Retrospective Survey, 1997-2003

The percentage of fully immunized children varied across racial/ethnic groups. While only 60% of African American children were immunized, almost 80% of Asian children were. No racial group has met the HP2010 objective of at least 90%.

Figure 6.14: Child Immunization Rates by Race/Ethnicity, Alameda County, 2003



Source: CAPE; Alameda County Kindergarten Retrospective Survey, 2003.

Dental Health

What is it?

Dental caries, or tooth decay, is the most common of all chronic and infectious diseases. It is caused by the bacteria, *Streptococcus mutans*. Foods such as refined carbohydrates or simple sugars can produce acidic plaque that feeds the bacteria and, over time, causes tooth decay.

Early Childhood Caries (ECC) (also called Baby Bottle Tooth Decay) is a rapidly developing form of dental cavities affecting the baby teeth as soon as they erupt at 6-12 months of age. ECC is caused by frequent and prolonged exposure to milk, formula, juices or other sweet drinks in bottles.

Pit and Fissure Decay is the most common type of dental caries among school age children 5-17 years of age, accounting for 80% of all tooth decay in this age group. Pit and Fissure Decay primarily affects the chewing surfaces of molar teeth.

Why is it important?

Dental caries, both treated and untreated, is a pervasive public health problem affecting the quality of life for young children and others not able to care for themselves. It is five times more common than asthma and seven times more common than hay fever. Its impact can be measured in both human and economic terms: unnecessary pain and suffering, absence from school and work, difficulty speaking and chewing, and diminished self-esteem. It has even resulted in failure to thrive in the very young. In more extreme cases treatment is traumatic and costly. Dental caries has its greatest impact on the very young, the elderly, the poor, minorities, and others who experience geographic, linguistic, or cultural barriers to accessing care.

Data from the 2005 California Oral Health Needs Assessment of children revealed that 54% of all kindergarteners and 71% of all 3rd graders had experienced dental caries. It also documented inequities associated with low income and ethnicity. For example, over one-third of children from low-income families had untreated tooth decay compared to only one-fifth of those from higher-income families. Latino children had a higher prevalence of dental decay than did White children.

Dental caries is almost entirely preventable. Key strategies for the primary prevention of dental caries include fluoridated water supplies, dental sealants in older children, and early preventive interventions with infants and toddlers. Community water fluoridation is the most cost effective means of delivering fluoride ion to our teeth. Topical fluoride may be applied directly to teeth by a dental professional, or it may be self-applied through the use of toothpaste with fluoride. Dental sealants, which are applied by dental professionals, prevent Pit and Fissure Decay and are best applied as soon as molars erupt into the mouth at ages 6-8 and 12-14 years. Dental sealants began to gain popularity as an effective treatment in the 1980s. Dental sealants are profoundly effective and prevent 80% of the decay that is experienced by school age children.

Individuals can prevent tooth decay by reducing the amount and type of foods that cause tooth decay and by increasing personal use of fluorides and anti-bacterials (like gum sweetened with xylitol). Tooth decay among infants and young children can be prevented by healthy parental feeding practices and the first dental check up by the first birthday, a policy now recommended by the American Academy of Pediatrics.

What is Alameda County's status?

The first ever representative oral health needs assessment of Alameda County children was completed in the Spring of 2004. This survey, involving a combined total of 3,269 kindergarten and third grade children from 22 public schools, documented that dental disease is of epidemic proportions.

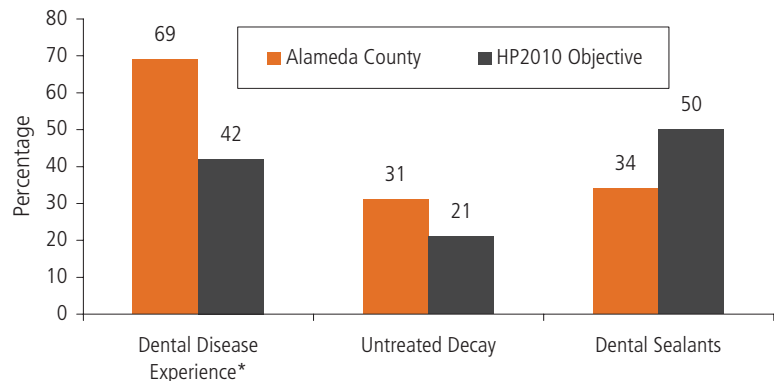
Overall, 69% of Alameda County third graders have had some experience with dental disease, either treated or untreated. This figure is well above the established HP2010 objective of 42% or lower.

Nearly one-third of third graders had untreated decay, a figure thought to be conservative since x-rays were not taken as part of the study. The HP2010 objective is to bring untreated decay among 6-8 year-olds down to 21%.

Alameda County is also significantly behind the national objective for preventive dental sealants. Only 34% of third graders had dental sealants on at least one molar while the HP2010 objective is 50% or more.

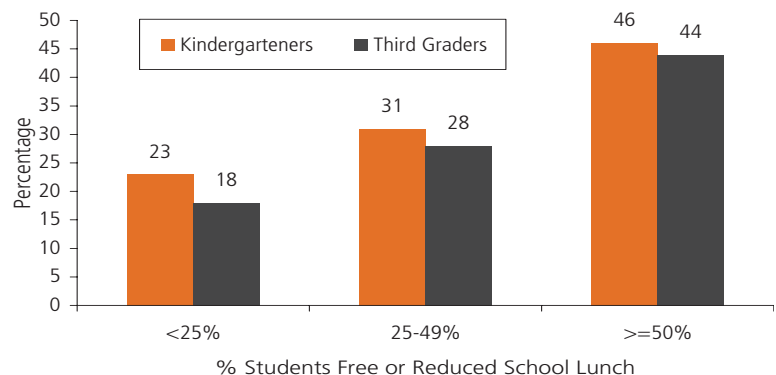
As school poverty level goes up so does the proportion of children with untreated tooth decay. Almost a quarter (23%) of kindergarteners and 18% of third graders in higher income schools had untreated tooth decay. The numbers double to 46% of kindergarteners and 44% of third graders when school poverty level reaches 50% or more of children on free and reduced school lunch program.

Figure 6.15: Oral Health of Third Graders and HP2010 National Objectives, Alameda County, 2002-2004



* Any treated or untreated decay.
Source: Alameda County Oral Health Needs Assessment, 2004.

Figure 6.16: Percentage of School Children With Untreated Dental Decay by School Poverty Status, Alameda County, 2002-2004

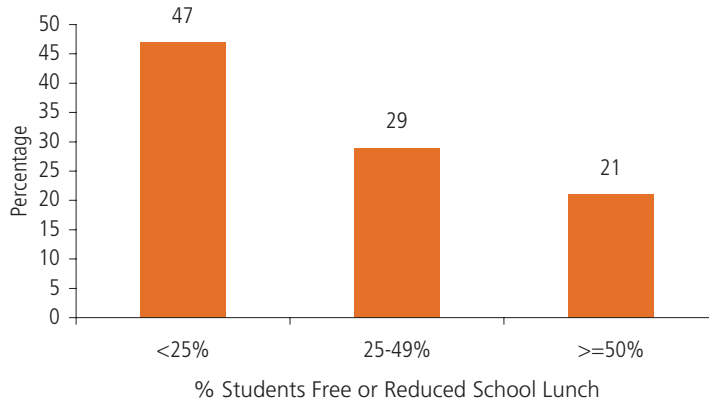


Source: Alameda County Oral Health Needs Assessment, 2004.

The proportion of Alameda County third graders with protective dental sealants decreased as school poverty level increased. In schools where 50% or more of students are on free and reduced lunch program, only 21% of third graders had sealants compared to 47% in schools where fewer than one-quarter of students are on free and reduced lunch.

This relationship suggests that poorer families have the hardest time getting preventive dental care.

Figure 6.17: Percentage of Third Graders With Dental Sealants by School Poverty Status, Alameda County, 2002-2004



Source: Alameda County Oral Health Needs Assessment, 2004.

What are we doing?

The Maternal, Paternal, Child, and Adolescent Health (MPCAH) Program of the Alameda County Public Health Department (ACPHD) provides a coordinated local effort to improve outreach and case finding activities for pregnant women and children including early and continuous perinatal, infant, and child care. The Program works to ensure the best possible start in life for infants and children in Alameda County. In the past, the programs of MPCAH focused mainly on women, children and adolescent. Starting last year, paternal components were either enhanced or added to the programs. Although MPCAH activities are aimed at increasing prenatal care, preventing low birth weight, infant death and teen pregnancy, the program involves fathers, male partners or father figures to improve the birth outcomes.

- The Improving Pregnancy Outcomes Program (IPOP) offers case management services and community health education classes in selected zip codes of Alameda County for eligible pregnant and parenting women to reduce infant mortality and improve pregnancy outcomes among African American women. IPOP's fatherhood program provides a variety of services for fathers and fathers-to-be including care coordination, referral and follow-up, counseling, advocacy and peer support.
- The Black Infant Health (BIH) Program targets the African American community in its efforts to reduce premature birth and infant mortality through improving access to a comprehensive set of services for at-risk women, the fathers and their children up to one year of age. The BIH program works with local prenatal care providers to make education and resource materials available to those they serve. The Black Infant Health Role of Men (ROM) Program targets partners of pregnant women enrolled in the Black Infant Health Program as well as parenting fathers and caregivers (stand-in fathers) in the community. The Program provides social support, employment search and preparedness, life skill training and in-home case management, as well as referral services for its participants.
- The MPCAH Program offers culturally appropriate perinatal outreach and education for women, infants and families through a multicultural Health Information Team. The aim is to encourage early entry into prenatal care, enrollment in WIC, tobacco and other substance use cessation, in

addition to other healthy behaviors. The Family Care Network targets at-risk pregnant women and new mothers for HIV/AIDS prevention.

- The MPCAH Program works with other county agencies and service providers to develop and implement a countywide Strategic Plan for addressing perinatal substance abuse and its effects. The program aims to reduce barriers to substance abuse treatment among pregnant women.
- The MPCAH Program provides technical assistance and training to Comprehensive Perinatal Services Program (CPSP) providers to ensure they are providing prenatal care according to state regulations, as well as identifying and enrolling Medi-Cal eligible women.
- MPCAH, through a Community Challenge Grant, works in partnership with Oakland schools, after-school programs, and in neighborhoods to provide health education, mentoring, and youth leadership opportunities to adolescents. The aim is to reduce the rates of teen birth with the focus on abstinence, birth control, refusal skills, access to health care, and healthy relationships. The grant also provides resources for a Regional Collaborative of youth health care providers and community members.
- The Male Involvement Program (MIP) is designed to include young men in the “equation” at the pre-conceptual stage. Young men are taught about their role in preventing pregnancies and sexually transmitted infections (STIs).
- The MPCAH Program works with Alameda County delivery hospitals to conduct the Sudden Infant Death Syndrome (SIDS) Risk Reduction campaign. The Fetal Infant Mortality Review (FIMR) Program works with local agencies in a broad-based, comprehensive case review process to better understand and prevent fetal and infant deaths. The Child Care Health Linkages Program works with childcare providers, other health care providers and other community based organizations to decrease childhood injury and mortality through increased caregiver education and awareness.

The Women, Infants and Children (WIC) Program in the Community Health Services Division, ACPHD, is a national nutrition education program that promotes healthy eating. Studies show that clients who participate in the WIC program have healthier pregnancies and healthier children. WIC offices are co-located with Public Health Nursing and other services in North Oakland, Eastmont Mall, Hayward and the Fremont Resource Center. Alameda County WIC Program serves over 18,000 pregnant and breastfeeding women and parents raising infants or children under the age of five years. Foster parents, guardians & single fathers who have custody of their children are also eligible.

WIC services include:

- Nutrition and health assessment from Registered Dietitians and trained nutrition counselors.
- Individual and group education on healthy eating and active living. Topics for the year 2006 include: classes on nutrition and breastfeeding for pregnant women, classes on healthy foods for infants and toddlers, promotion of fruits and vegetables, farmers markets, family fitness and heart healthy foods.
- Breastfeeding help, including a Breastfeeding Helpline, breastfeeding advice and breast pumps; additional funding from California Nutrition Network, a USDA pilot program and Every Child

Counts pays for breastfeeding peer counselors and board certified Lactation Consultants in WIC offices.

- Help getting health insurance, finding a doctor or dentist, getting immunizations and getting access to other community programs: Health Information Team workers and Community Health Team outreach workers help clients get health care and other needed services.
- Money coupons to buy healthy foods such as milk, beans, peanut butter, cheese, iron fortified cereal, pure juice, and eggs.

The Immunization Assistance Project of the Division of Communicable Disease Control and Prevention, ACPHD, provides education and targeted outreach to families and community groups; training and technical assistance to physicians, nurses, and medical assistants; disease investigation and surveillance; vaccine distribution and management; and immunizations to children, adolescents, and seniors at risk of under-immunization. The Project also participates in the implementation of a regional immunization registry. Assessments of the immunization status of two-year old children are conducted each year in county clinics and community health centers. The immunization status of children in childcare centers and kindergarten is monitored annually.

The Office of Dental Health, ACPHD, has organized a variety of age-related interventions designed to address both the primary and secondary prevention of dental caries. In brief, these include the following: Healthy Kids, Healthy Teeth, Early Childhood Caries Initiative for 0-5 year old Medi-Cal enrollees; the California Children's Dental Disease Prevention Program, which provides sealants and dental education in a school-based setting; The Healthy Smiles Children's Dental Treatment Program for children who require dental care and have no insurance; and Dental Health Referral Services for people of all ages who need dental referrals and information.

What else do we need to do?

Maternal, Paternal, Child, and Adolescent Health

- Promote full participation in Medi-Cal in order to assure access to prenatal care and vital medical and support services by providing information and advocacy services that increase enrollment.
- Develop programs that aim to decrease unwanted pregnancies by empowering young adults to make informed decisions about their reproductive health by addressing a continuum of healthy life for pre-child bearing adolescents beginning from pre school age.
- Develop and implement programs that would offer health services for women before and during pregnancy. Participate in action-oriented community processes that lead to improvement of services and resources for women, infants and families of Alameda County.
- Collaborate with local obstetric providers and delivery hospitals to prevent preterm labor through intensive patient education. Collaborate with community agencies to develop and implement aggressive outreach programs targeting high-risk pregnant women.
- Target high-risk geographic areas for intensive parent education including parenting skills, safety precautions, nutrition, and healthy lifestyles for women and children.
- Increase access to school based clinics and other youth-centered clinics to provide primary care,

referrals, counseling, health education, and youth development services to both adolescent boys and girls.

- Increase outreach and education to young men to provide job training, health education, and other types of classes to improve personal relationships and promote anger management and responsible fatherhood.

Women, Infants and Children (WIC)

- Expand the development of Healthy Living Councils in additional school districts, including Livermore and Fremont.
- Support neighborhood efforts to gain WIC vendor authorization for neighborhood grocery stores in low income areas.
- Seek funding to support outreach for WIC and other food programs to very low income vulnerable populations including homeless families.

Immunizations

- Develop and implement a collaborative plan to improve the immunization rates of African American and Latino children.
- Increase participation in the immunization registry in order to reach the Healthy People 2010 goal of having 95% of children less than six years of age in a registry.
- Provide education and consultation to medical providers on new adolescent and adult vaccines for pertussis in order to improve vaccination coverage and decrease the incidence of pertussis in Alameda County.

Dental Health

- Collaborate with public and private organizations to conduct a representative County-wide Oral Health Needs Assessment at three-year intervals in order to 1) measure oral/dental health, 2) evaluate prevention and intervention efforts, 3) make comparisons with state and national data.
- Expand successful elements of the Healthy Kids, Healthy Teeth Demonstration project to other low income families beyond those enrolled in Medi-Cal.
- Fully implement two dental teams working to provide school based dental services including the provision of dental sealants.
- Continue the Healthy Smiles Dental Treatment Program strengthening outreach and follow-up services to facilitate access to care and insurance resources.
- Actively support the statutory change that would require Child Health and Disability Program physicians to refer all children beginning at age one to the dentist.

Men's Health

- Additional development goals in the Office of Men's Health include supporting men in their ability to pay child support; providing domestic violence interventions; promoting men's emotional wellness through promotion of positive fatherhood programs; and changing policy to require paternal inclusion in mandated maternal programs at state and local levels.

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