Family Health Services Division Profiles 2009

Department of Health
State of Hawai‘i

FOREWORD

The Hawai‘i Department of Health is pleased to present the first edition of the Family Health Services Division Program Profiles. This report is intended to serve as a reference for the various populations served by the division and the health issues facing these vulnerable populations. In addition, the profile provides a picture of the various programs within the Hawai‘i Department of Health (DOH), Family Health Services Division (FHSD), its activities and progress on improving the health statistics and outcome measures tracked by FHSD.

It is my hope that this report will be a useful source of quantitative and qualitative information to health policymakers, planners and all of us in the community who share a common desire to improve the health status of women, infants, children, and adolescents in Hawai‘i.

Chiyome Leinaala Fukino, M.D.
Director of Health

DIVISION COMMENTARY

Impacting the public health at a statewide level is very complex because of the economic and societal influences on health outcomes. Therefore, it requires a community response with resources and partners in all segments of our State. While the department has limited resources, it is charged with the monitoring of health status and the gathering of appropriate stakeholders to advance the system of care for women, infants, children, adolescents and families.

Many of the health status indicators tracked by Family Health Services Division have become static or have worsened overtime; such as infant mortality and prematurity. Positive movement have been made in areas where there are dedicated resources to adequately address at-risk populations, where there have been policy and/or educational efforts to change behavior at a community level, and where there are private and public collaborations. Such were the ingredients for success in areas like Chlamydia prevention, Injury prevention, Newborn Metabolic Screening, and Breastfeeding promotion. Another element of success is awareness of the issues and identification of possible points of intervention. Intimate Partner Violence Prevention and Fetal Alcohol Spectrum are two areas which are in this initial phase of development.

One of Family Health Service Division's values is the inclusion of family members in decision making and strengthening the system of care for the most vulnerable within our community. Progress has been made in improving the system of care for children with special health needs, early childhood, and the uninsured; however, much more effort and success is needed.

Hawai'i is experiencing a retrenchment of resources which impact family health, because of the downturn in our economy. Now is the time to revisit the resources available at the departmental and community level, to reprioritize our outcomes and explore new points of intervention. It is our hope that the data shared and the presentation of family health's program efforts will assist the department and policy makers to more effectively address the health needs of women, children and adolescents throughout the state. Many of the issues facing Family Health Services Division are generational in nature; therefore we must continue to build on our public health foundation to assure the health of generations to come.

Loretta J. Fuddy, A.C.S.W., M.P.H.
Family Health Services Division Chief

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Family Health Services Division Overview

Family Health Services Division

The Family Health Services Division (FHSD) is one of the 12 divisions of the Hawai'i State Department of Health (DOH). FHSD is under the Health Resources Administration of the DOH. The mission of the Family Health Services Division is to improve the well-being of families by increasing public awareness and professional education and assuring access to a system of care that is family-centered and community-based. This system should include preventive, early detection, treatment, habilitative and rehabilitative services. The Division administers and coordinates programs and services concerned with health promotion and disease prevention for families, including women of childbearing age, mothers, infants, children and youth. These programs are carried out through the:

- **Maternal and Child Health Branch (MCHB)**
  The Maternal and Child Health Branch administers a statewide system of services to reduce health disparities for women and their families by utilizing the following public health strategies: mobilizing community partnerships and coalitions; conducting needs assessments; assuring quality health care through development and monitoring of contracts and services; monitoring health status and supporting systems of care.

- **Children with Special Health Needs Branch (CSHNB)**
  The Children with Special Health Needs Branch is working to assure that all children and youth with special health care needs (CSHCN) will reach optimal health, growth, and development, by improving access to a coordinated system of family-centered health care services and improving outcomes through systems development, assessment, assurance, education, collaborative partnerships, and family support.

- **Women, Infants and Children (WIC) Services Branch**
  The Supplemental Nutrition Program for Women, Infants and Children (WIC) is a federally funded program which provides nourishing supplemental foods, nutrition counseling, breastfeeding promotion and health and social service referrals. WIC participants are either pregnant, breastfeeding, or postpartum women, infants or children under age five who meet income guidelines and have a medical or nutritional risk.

Priority Functions

FHSD's federal and state mandates are very broad in nature; it is population-based, addressing the public health needs of all women, infants, children, adolescents, and families with particular attention to vulnerable populations. Therefore, the Family Health Services Division's primary functions are to:

- Assure that systems are in place to address the full continuum of care throughout the life cycle from preconception to birth to adolescence to adulthood among the population in Hawai'i.

- Address the health and safety needs of vulnerable individuals, children and youth, with particular attention to children with special health needs.

Data Sources

Family Health Services Surveillance Data

The Family Health Services Division is responsible for administering several surveillance systems to monitor the health of the maternal and child population.

Pregnancy Risk Assessment Monitoring System

The Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS) is a population-based surveillance system designed to identify and monitor maternal experiences, attitudes, and behaviors before, during and just after pregnancy. The program is funded by the Centers for Disease Control and Prevention (CDC). Hawai'i PRAMS provides ongoing monitoring of maternal behaviors to determine how to reduce infant deaths, decrease low birth weight and how to improve the overall health of the population in Hawai'i. Data is self-reported from a sample of recent mothers through a survey conducted by mail with telephone follow-up. Every year, about 2,000 women who deliver a live infant in Hawai'i are randomly selected to participate.

Birth Defects Monitoring System

The Birth Defects Monitoring System (BDMS) program is a population-based surveillance system that collects demographic, diagnostic, and health risk information on infants up to one year of age with specific birth defects and pregnancies resulting in adverse reproductive outcomes. Over 1,000 CDC mandated congenital anomalies are identified in approximately every 17,000 births annually. The program provides data and information on incidence, trends, and clustering, which contribute toward identifying genetic factors, environmental hazards, and other causes or risk factors.

Pediatric Nutrition Surveillance and Pregnancy Nutrition Surveillance System

The Pediatric Nutrition Surveillance System (PedNSS) and the Pregnancy Nutrition Surveillance System (PNSS) are public health surveillance systems that monitor the nutritional status of low-income pregnant mothers and their children in federally funded maternal and child health programs. Data on birth weight, breastfeeding, anemia, short stature, underweight, and overweight are collected for children who attend public health clinics for routine care, nutrition education, supplemental food, trimester of prenatal care entry, weight, and weight changes over the pregnancy, smoking, and alcohol use, and other factors are collected in these surveillance systems. In Hawai'i, data collected is from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) participants.

Program Data

Associated with the Family Health Services Division are several programs and providers that collect and compile their own data. Some of these programs include the Family Planning Program, the Adolescent Health Program, Child Death Review, Perinatal Support Services, Baby Safe, Healthy Start, Early Intervention, Big Island Perinatal Health Disparities Project, and the WIC Program, to name a few. In addition, FHSD supports many other state government initiatives as well as private and public health related programs. Data from these sources have been included in this report to enhance the surveillance data sets and to highlight current information on strategies being used to achieve essential public health functions.

Other Surveillance Data Sets

In addition to the core surveillance data sets administered by the Family Health Services Division, there are several other data sets that are integral to the function of the division in meeting its objectives and used in the preparation of this report.

Vital Statistics

Vital Statistics is housed in the Office of Health Status Monitoring (OHSM) in the Department of Health and collects important information about births, deaths, and marriages in the state. Several indicators on health status for the state are calculated based on data collected in vital statistics.

Behavioral Risk Factor Surveillance System Survey

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based health survey that collects information on adult health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The BRFSS is a CDC funded survey that has been implemented in Hawai‘i since 1986. It is a random-digit telephone-based annual survey which provide weighted estimates to reflect those living in Hawai‘i. Since 2000, the number of respondents has increased from approximately 2,000 to 6,000 adults aged 18 years and older.

Hawai‘i Health Survey

The Hawai‘i Health Survey (HHS) is a continuous statewide household survey of health and socio-demographic conditions. The HHS started in 1968 is funded through OHSM. In 1996, the survey converted to a telephone survey that focused on respondents 18 years of age and older that was knowledgeable about their household in order to collect information on persons of all ages living in the household. In 2004, 6,789 household respondents were interviewed and information on a total of 19,669 household members was obtained. This information is then weighted to reflect statewide estimates excluding households without telephones, Niihau, those living in group quarters, and those that are homeless. The survey provides demographic information for observing population changes during the intercensal decade. It provides state and sub-area estimates of gender, age, income, race, education, household size, insurance status, health status, morbidity, and food security.

Hawai‘i Health Information Corporation

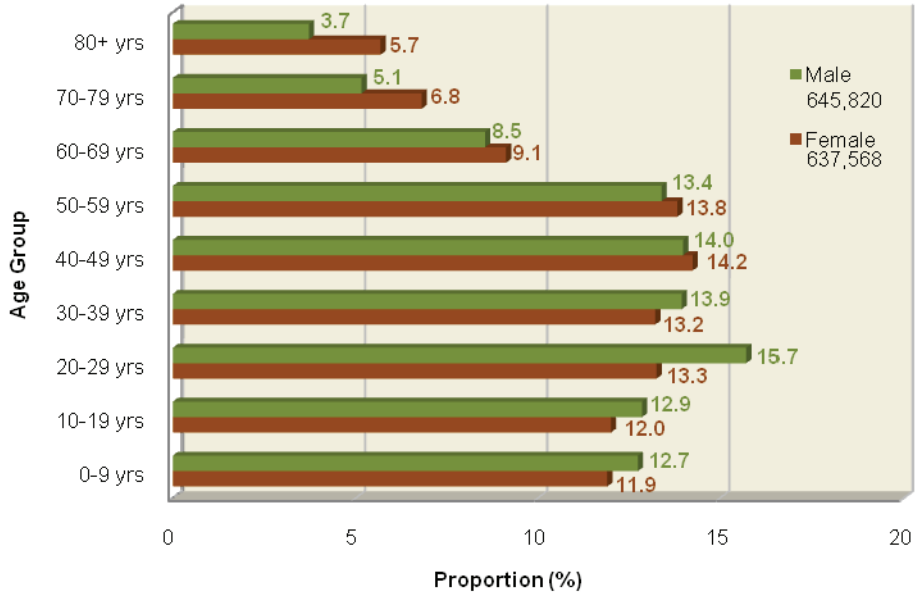
The mission of the Hawai‘i Health Information Corporation (HHIC) is to collect, analyze, and disseminate statewide health information in support of efforts to continuously improve the quality and cost-efficiency of health care services provided to the people of Hawai‘i. HHIC is a private, not-for-profit corporation established in 1994 by the state’s major private health care organizations. HHIC maintains one of the largest healthcare databases in Hawai‘i, including inpatient, emergency department, and financial data. As an independent organization, HHIC has been collecting inpatient hospital data from licensed acute care hospitals in Hawai‘i since 1995. The inpatient database currently includes approximately two million patient records. In 2000, Emergency Department (ED) data was added to HHIC’s data repository and currently contains three million patient records.

Population Overview

The following section serves to illustrate the population and geographic area that FHSD is mandated to cover under the essential public health functions. The data herein describe this general population by several demographic factors, including: age, sex, race, and geography. To further delineate some of the measures commonly used to report on socio-economic conditions, particularly those with a high relationship to adverse health outcomes, we have included figures in this overview that represent several of the key performance measures and outcomes which are addressed at multiple levels throughout the division. These main outcomes are integrated into goals for many of the programs and projects within FHSD. Some of the programs in FHSD provide funds for direct services through community health centers and other providers, while other programs focus on improving the overall system of care. We have presented overall trends in Hawai'i as well as disparities in race/ethnicity, age, and county when available. National comparisons are helpful and have been provided when possible. Some of these same topics are later presented in other sections of this report to highlight specific work done by individual programs including low birth weight, prenatal care, and intendedness of pregnancy.

Population Demographics

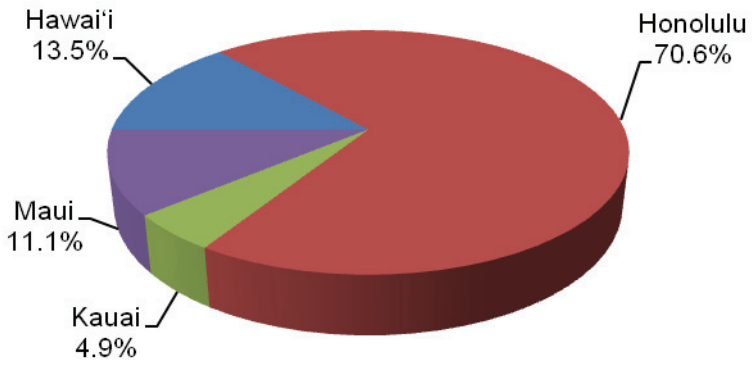
Figure 1.1 State of Hawai'i, Population Proportions by Age and Sex: 2007



Source: CC-EST2007-ALLDATA-[ST-FIPS]: Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2000 to July 1, 2007.

The proportions of females in the population in Hawai'i are generally more evenly distributed than males who have higher proportions at younger ages. It is estimated that 5.7% of the female population is 80 years and older, compared to 3.7% of the male population. At the other extreme, 11.9% of the female population is under 10 years of age compared to 12.7% of the male population. The transition appears to occur around age 40, when the proportions of females begin to exceed the proportions of males in the age groups shown.

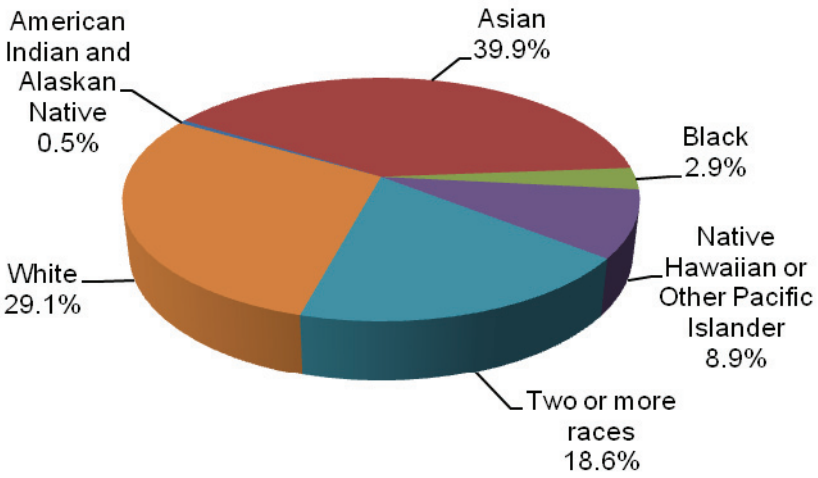
Figure 1.2 State of Hawai‘i, Population by County: 2007



The majority of the population (70.6%) resides in Honolulu County, with smaller proporitions in Hawai‘i, Maui, and Kauai Counties.

Source: CC-EST2007-ALLDATA-[ST-FIPS]: Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2000 to July 1, 2007.

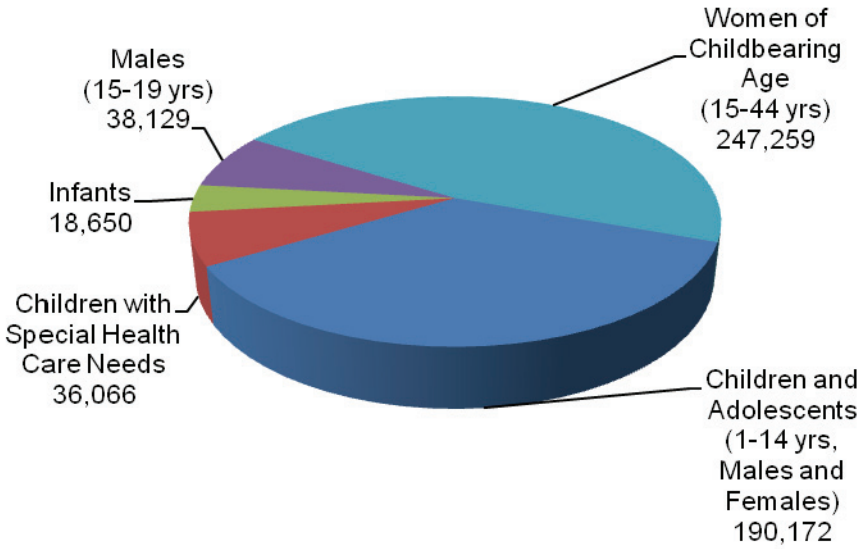
Figure 1.3 State of Hawai‘i Population by Race: 2007



Based on census bureau estimates, 18.6% of the population in Hawai‘i report two or more races. The Native Hawaiian or other Pacific Islander single race group makes up only 8.9% of the population; whereas, the Asian group (which includes all Asian ethnicities) makes up 39.9% of the state population.

Source: CC-EST2007-6RACE-[ST-FIPS]: Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for Counties in [STATE]: April 1, 2000 to July 1, 2007.

Figure 1.4 State of Hawai'i, Family Health Services Division Target Population: 2007

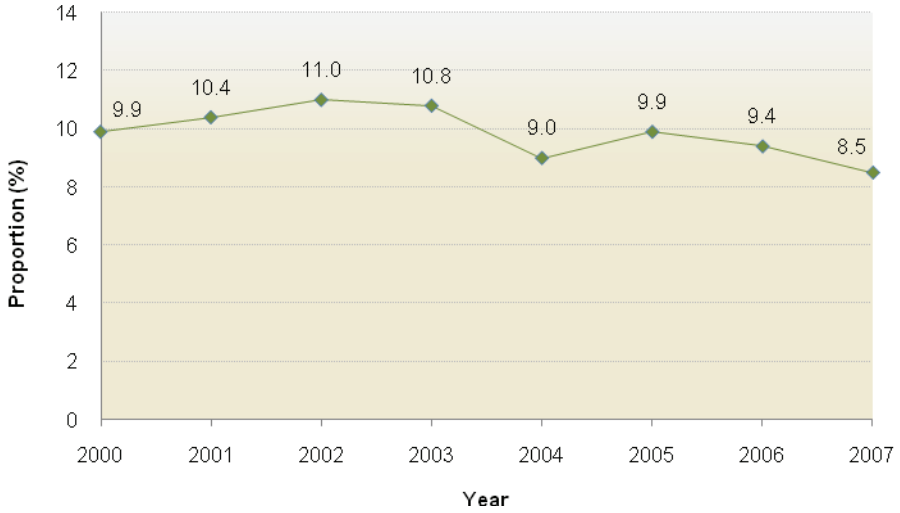


The Family Health Services Division serves a diverse population, estimated that 41% of the state population or 530,276 individuals. In 2007, there were close to 250,000 women of child bearing age and almost 200,000 children and adolescents 1-14 years of age. Additionally, it was estimated that over 36,000 children have special health care needs.

Source: U.S. Bureau of the Census. 2000 Census. U.S. Census Bureau, Population Division, "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States and States: July 1, 2007" (SC-EST2007-AGESEX_RES) (May 1, 2008).
U.S. Department of Health and Human Services. Health Resources and Services Administration. The National Survey of Children with Special Health Care Needs. 2005-2006

Income/Poverty Demographics

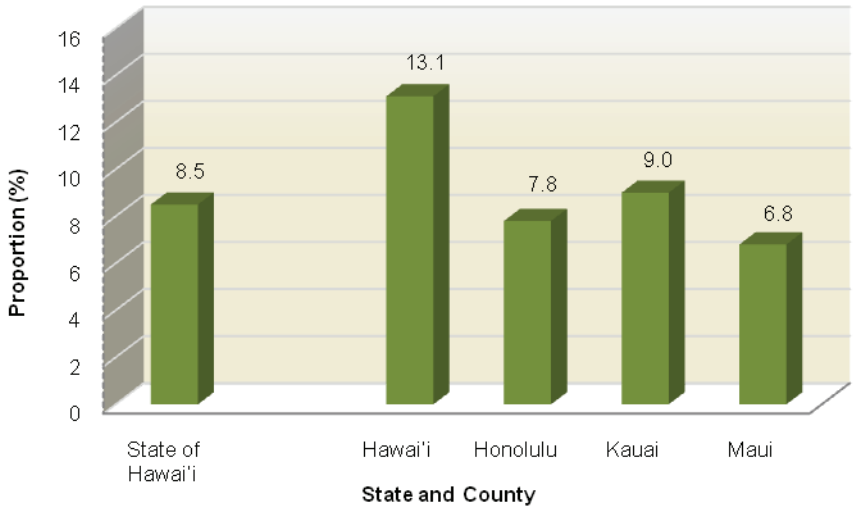
Figure 1.5 State of Hawai'i, Estimates for All Ages in Poverty: 2000-2007



A particularly vulnerable population that is at risk for a range of poor health outcomes includes those at or below the poverty level. Since 2000, Hawai'i has seen a decline in the percent of the population at or below the poverty level. In 2007, an estimated 8.5% in Hawai'i lived in poverty, below the national estimate of 12.5%.[1]

Source: U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) Program.
Note: Beginning with the estimates for 2005, data from the American Community Survey were used in the estimation procedure; all prior years used data from the Annual Social and Economic Supplements of the Current Population Survey. There is uncertainty associated with all estimates in this program. Caution should be used attempting to compare estimates.

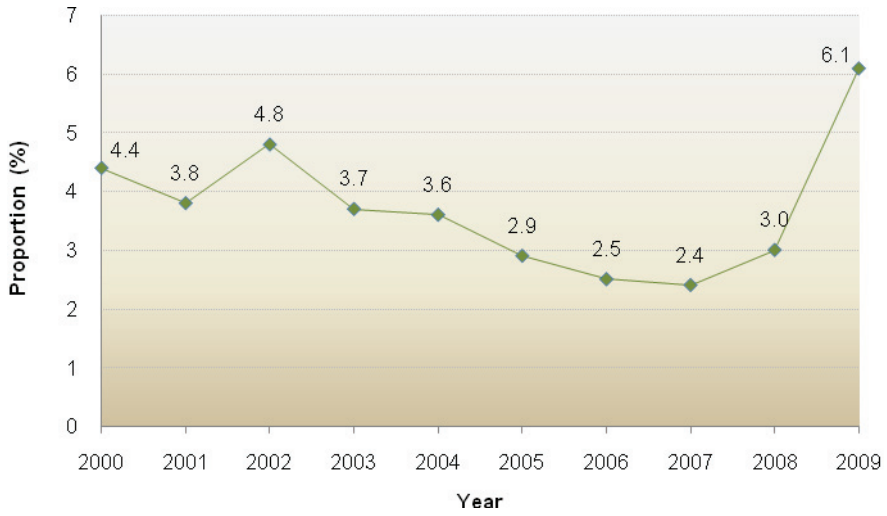
Figure 1.6 State of Hawai'i, Estimates for All Ages in Poverty by County: 2007



In 2007, the highest estimate of individuals living in poverty was in Hawai'i and Kauai Counties with both being above the statewide estimate. Honolulu and Maui Counties had lower estimates of individuals living in poverty.

Source: U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) Program.
Note: Beginning with the estimates for 2005, data from the American Community Survey were used in the estimation procedure; all prior years used data from the Annual Social Economic Supplements of the Current Population Survey. There is uncertainty associated with all estimates in this program. Caution should be used in attempting to compare estimates.

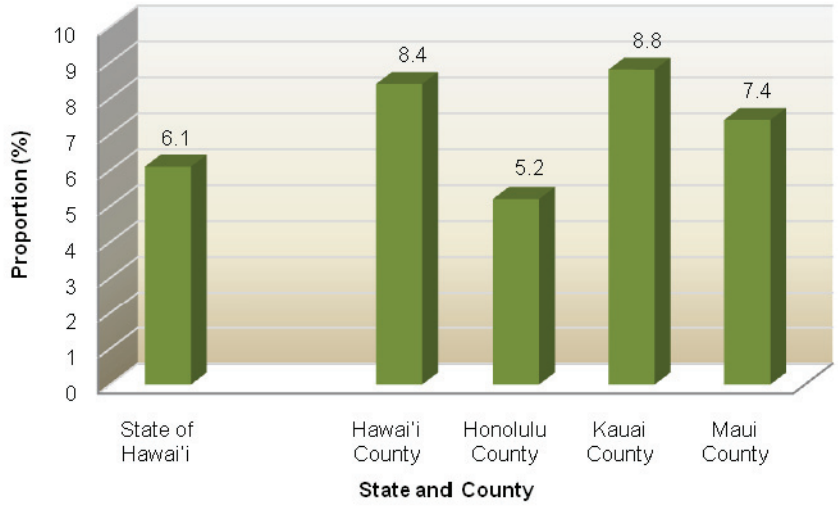
Figure 1.7 State of Hawai‘i, Unemployment Rate by Year (January): 2000-2009



Another vulnerable population that is at risk for a range of poor health outcomes includes those that are unemployed. From 2002 to 2007, there was a 50% decrease in the unemployment rate for the state of Hawai‘i (4.8% to 2.4%, respectively). Since 2007, however, the unemployment rate has climbed considerably. Data from January 2009 show unemployment at 6.1% in Hawai‘i, below the national rate of 7.6%.[1]

Source: U.S. Bureau of Labor Statistics Unemployment Rate (seasonally adjusted), 2000-2009. http://www.bls.gov/data. Accessed online March 27, 2009.

Figure 1.8 State of Hawai‘i and Counties, Unemployment Rate (January): 2009



In January 2009, Kauai, Hawai‘i, and Maui counties all had unemployment rates higher than the state average rate. Honolulu County’s unemployment rate, however, was lower than the state average rate.

Source: U.S. Bureau of Labor Statistics Unemployment Rate (not seasonally adjusted), January 2009. http://www.bls.gov/data. Accessed online March 27, 2009

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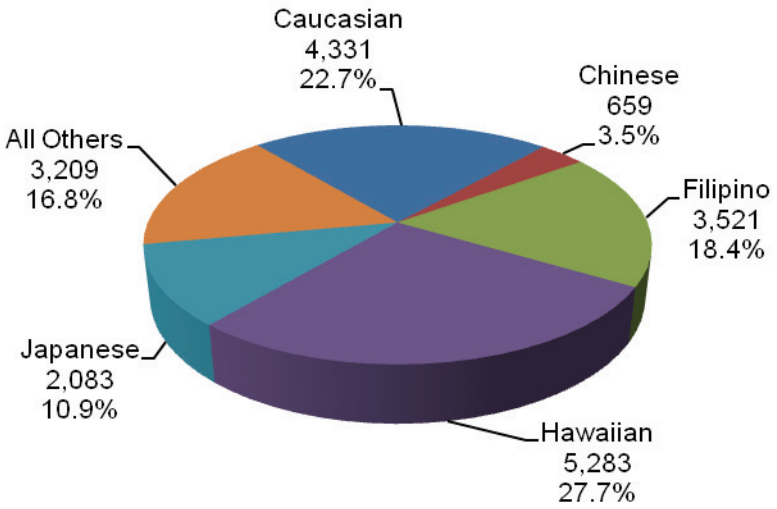
Births

Figure 1.9 State of Hawai‘i, Live Births, Resident Population: 1990-2007

Source: Hawai‘i State Department of Health, Office of Health Status Monitoring.

Over the last 18 years, the number of births in Hawai‘i has varied from about 17,000 to 20,500 annually. There has been a steady increase in the number of births since the late 1990’s with just over 19,000 live births to Hawai‘i residents in 2007.

Figure 1.10 State of Hawai‘i, Live Births by Maternal Ethnicity, Resident Population: 2007



Source: Hawai‘i State Department of Health, Office of Health Status Monitoring.

The categorization of race reflected above is based on the single coded algorithm provided by the Hawai‘i Department of Health, Office of Health Status Monitoring (OHSM), and does not reflect those that list multiple races and ethnicities on the birth certificate. This approach is different than that supplied by the census bureau (and shown earlier in this booklet) that provides a category of “Two or more races” in population estimates. In 2007, just over 27% of births were coded with the mother being of Hawaiian ancestry, followed by Caucasian and Filipino racial/ethnic groups. An “other” group was coded in almost 17% of births in the state of Hawai‘i.

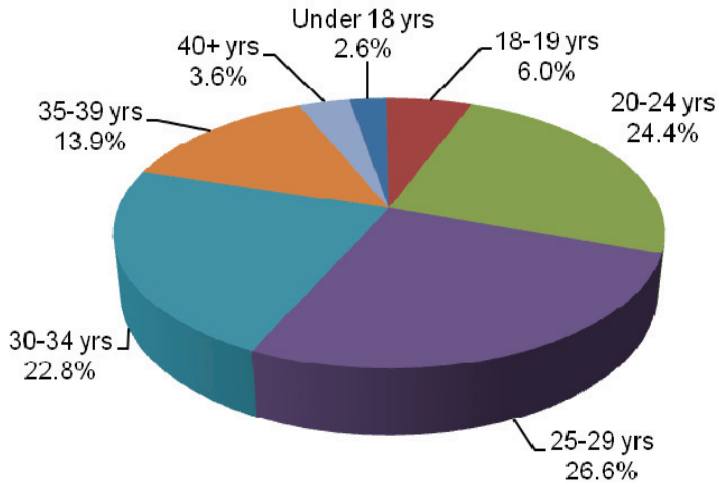
Figure 1.11 State of Hawai‘i, Live Births by Ethnicity of Mother and Father, Resident Population: 2007

ETHNICITY OF FATHER	ETHNICITY OF MOTHER						
	Caucasian	Hawaiian	Chinese	Filipino	Japanese	All Others	Total
Caucasian	3,067	438	105	386	353	405	4,754
Hawaiian	428	2,916	69	673	434	266	4,786
Chinese	23	64	273	36	105	44	545
Filipino	157	583	35	1,865	175	121	2,936
Japanese	116	286	114	189	790	85	1,580
All Others	540	996	63	372	226	2,288	4,485
TOTAL	4,331	5,283	659	3,521	2,083	3,209	19,086

Source: Hawai‘i State. Department of Health. Office of Health Status Monitoring.

Infant ethnicity is determined by the reported ethnicity of both the mother and the father. The figure shows the number of births among five (plus “All Others”) of the singly coded ethnic groups defined by OHSM. Overall, the majority of all births should be considered multi-ethnic based on the above ethnic groups. This proportion will likely increase if all ethnic groups that are entered on the birth certificate are accounted for in analyses. This full detail on all ethnic groups is not generally reported in estimates.

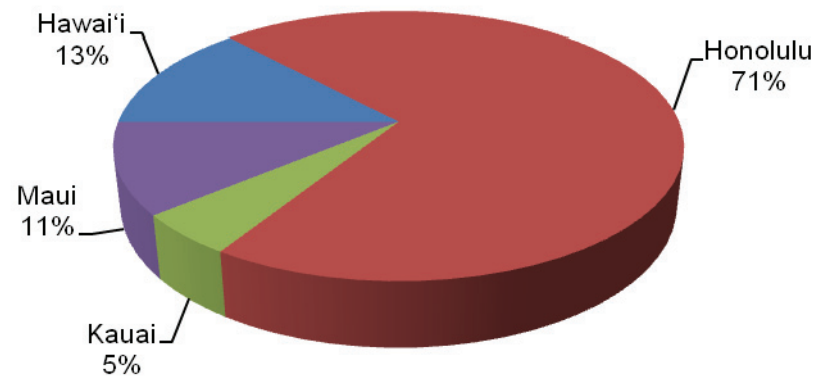
Figure 1.12 State of Hawai‘i, Live Births by Maternal Age, Resident Population: 2007



In 2007, live births in Hawai‘i were distributed almost evenly among those women aged 20-24, 25-29 and 30-34 years old with each accounting for about a quarter of all births. The next largest group of women giving birth to live infants was those aged 35-39 years old.

Source: Hawai‘i State Department of Health, Office of Health Status Monitoring.

Figure 1.13 State of Hawai‘i, Live Births by County of Residence, Resident Population: 2007



The proportion of live births by county of residence closely follows the distribution of the population with the majority occurring to women who reside in Honolulu County followed by Hawai‘i, Maui, and Kauai Counties.

Source: Hawai‘i State Department of Health. Office of Health Status Monitoring.

In an average week in Hawai‘i:
367
babies are born

Infant Mortality

Issue:

The death of an infant is a critical indicator of the health of a population. It reflects the overall state of maternal health as well as the quality and accessibility of primary health care available to pregnant women and infants. Some risk factors for an infant death include being born of low birth, a short gestation, some race/ethnic groups, access to medical care, sleep positioning, and exposure to smoking.[2]

Healthy People 2010 Objective:

Decrease the rate of infant mortality among all groups to 5.0 per 1,000 live births.

National Data:

The national infant mortality rate was 6.8 deaths per 1,000 live births in 2005. The United States' international ranking fell from 12th in 1960 to 23rd in 1990 and to 29th in 2004. (International comparisons of infant mortality can be affected by differences in reporting of fetal and infant deaths. However, it appears unlikely that differences in reporting are the primary explanation for the United States' relatively low international ranking.) In 2005, there was a more than threefold difference in infant mortality rates by race and ethnicity, from a high of 13.6 for non-Hispanic black women to a low of 4.4 for Cuban women. Infant mortality rates were above the U.S. average for non-Hispanic black, Puerto Rican (8.3), and American Indian or Alaska Native (8.1) women. These differences may relate in part to differences in risk factors for infant mortality such as preterm and low birth weight delivery, socioeconomic status, access to medical care, etc. However, many of the racial and ethnic differences in infant mortality remain unexplained.[3]

Hawai'i Data:

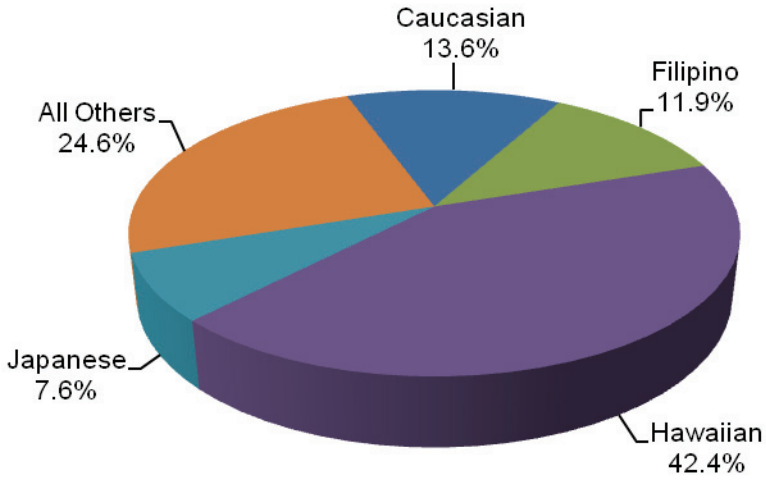
Figure 1.14 State of Hawai'i, Infant Mortality Rate, Resident Population: 1990-2007

In Hawai'i, there has been little change in the infant mortality rate (IMR) since the early 1990's with a low of 5.3 per 1,000 live births in 1996 and 2004, and a high of 7.6 per 1,000 live births in 2000. In 2007, there were 118 infant deaths to residents in Hawai'i which represents an IMR of 6.2 per 1,000 live births. This is slightly below the national average but still does not meet the HP 2010 goal.

Source: Hawai'i State Department of Health, Office of Health Status Monitoring.
Note: The IMR in Hawai'i is somewhat unstable for year to year comparison due to small numbers, but the overall trend is stable.

In an average week in Hawai'i:
2
infants die before their first birthday

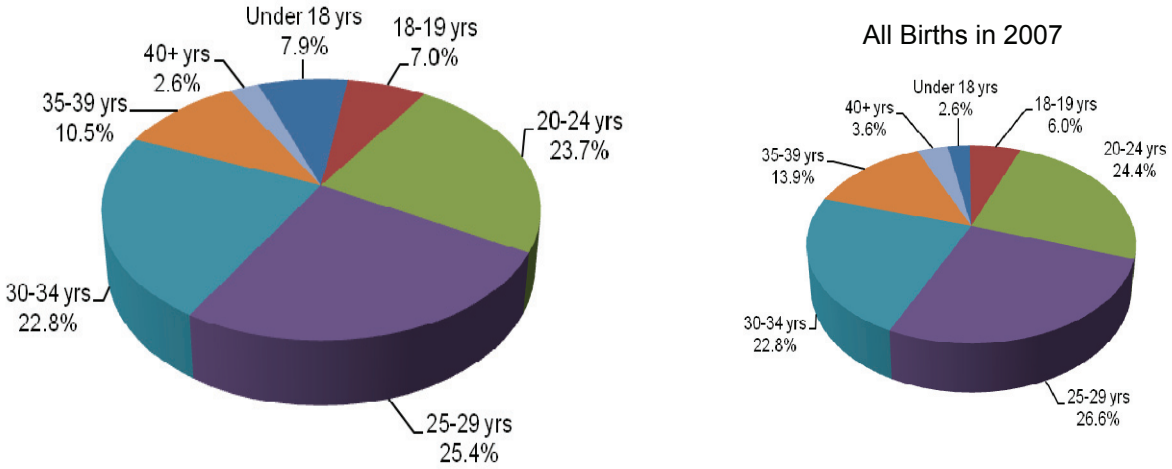
Figure 1.15 State of Hawai'i, Infant Deaths by Ethnicity of Child, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.
Note: The Office of Health Status Monitoring only reports out the ethnicity of the child (based on death certificate information) in statistics related to infant mortality.

Based on the ethnicity of the child, Hawaiian/Part-Hawaiian infants comprise 42.4% of all infant deaths with a group "All others" reported in 24.6% of all infant deaths. Due to the differences between maternal ethnicity and reported child ethnicity, no direct comparisons can be made. In future analysis, accounting for the unique multi-ethnic population in Hawai'i would be helpful to characterize health outcomes including infant mortality.

Figure 1.16 State of Hawai'i, Infant Deaths by Maternal Age, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, mothers under 18 years of age accounted for 7.9% of infant deaths, yet only made up 2.6% of all live births in the state. Women 35-39 years of age had 10.5% of infant deaths, but accounted for 13.9% of live births in the state. There were minimal differences for the other age groups reported. The actual number of infant deaths is greatest in those 20-34 years of age, which as a group accounted for 85 deaths which represents 72% of all infant deaths.

Intended Pregnancy

Issue:

An unintended pregnancy is expensive no matter what the outcome. Medically, unintended pregnancies are serious in terms of the lost opportunity to prepare for an optimal pregnancy, the increased likelihood of infant and maternal illness, and the social, economic, and emotional challenges related to making decisions about pregnancy termination. The consequences of unintended pregnancy are not confined to those occurring in teenagers or unmarried couples. In fact, unintended pregnancy can carry serious consequences at all ages and life stages.[2]

Healthy People 2010 Objective:

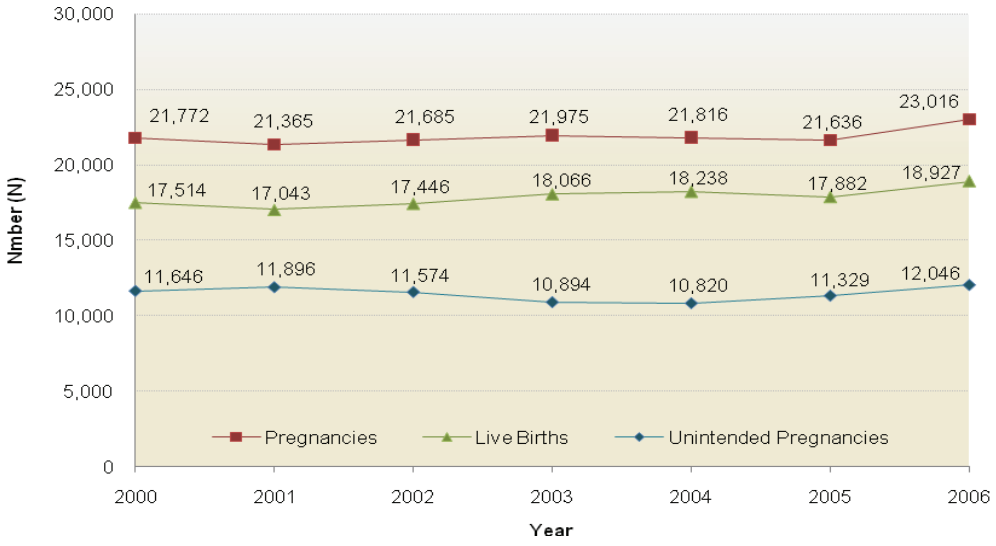
Increase the proportion of pregnancies that are intended to 70% (or decrease unintended pregnancies to 30%).

National Data:

In 2001, 49% of pregnancies in the United States were unintended. The rate of unintended pregnancy in 2001 was substantially above average among women aged 18–24, unmarried (particularly cohabiting) women, low-income women, women who had not completed high school, and were of a racial/ethnic minority group. Between 1994 and 2001, the rate of unintended pregnancy declined among adolescents, college graduates and the wealthiest women, but increased among poor and less educated women.[4]

Hawai‘i Data:

Figure 1.17 State of Hawai‘i, Unintended Pregnancy, Resident Population: 2000-2006

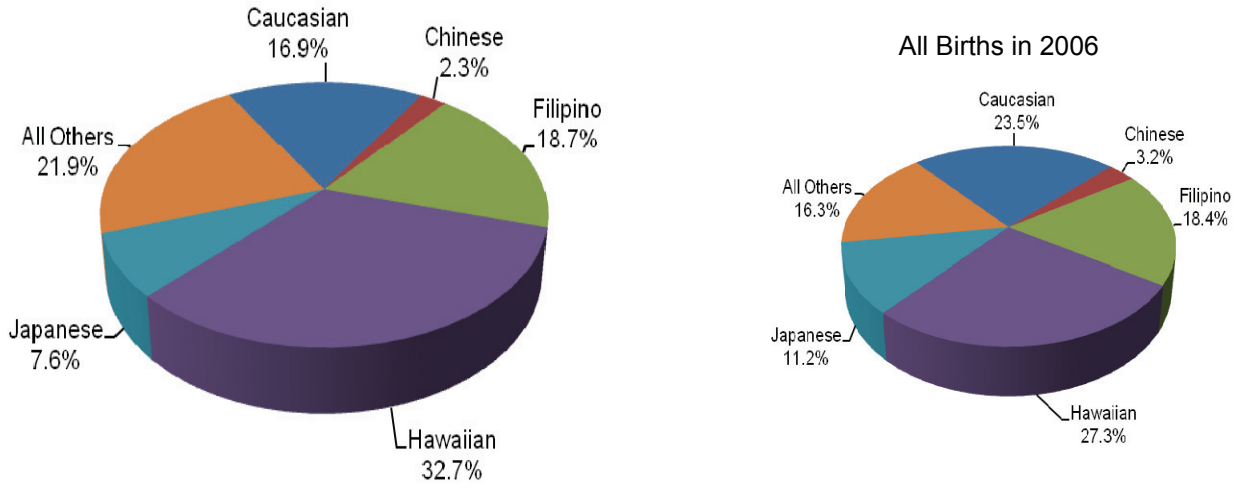


The number of pregnancies in Hawai‘i was consistent from 2000 to 2005 at around 22,000, but increased in 2006 to 23,016. In 2006, an estimated 52.3% (or 12,046) of pregnancies were unintended with minimal change since 2000 when the proportion was 53.4%. Hawai‘i remains higher than the national prevalence of 49% in 2001,[4] and does not meet the HP 2010 objective.

Source: Hawai‘i State Department of Health, Pregnancy Risk Assessment Monitoring System. Hawai‘i State Department of Health, Office of Health Status Monitoring. The rate of unintended pregnancy is derived from estimates from the OHSM birth, fetal death, and Induced Termination of Pregnancy files which were not available for 2007 at time of publication.

In an Average week in Hawai‘i:
232
unintentional pregnancies occur

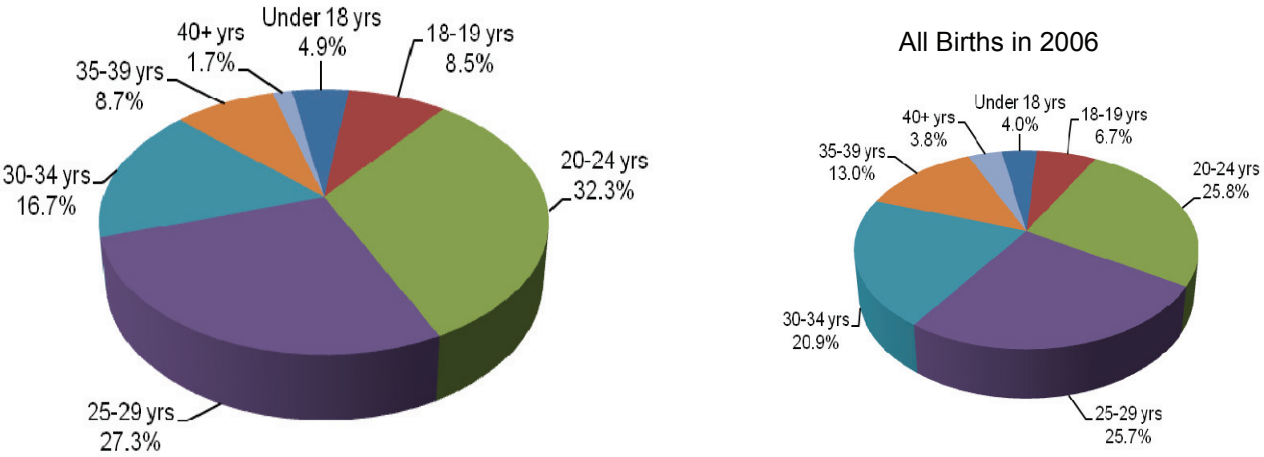
Figure 1.18 State of Hawai'i, Unintended Live Births by Maternal Ethnicity, Resident Population: 2006



Source: Hawai'i State Department of Health, Pregnancy Risk Assessment Monitoring System, Hawai'i State Department of Health, Office of Health Status Monitoring. Comparisons of maternal a race were done to the distribution of 2006 births not presented in this report, but were similar to that for the 2007 birth distribution by maternal race presented in this report.

In 2006, based on maternal ethnicity, there were more births resulting from an unintended pregnancy than expected in Hawaiian and women in the "All Others" race group compared to the population of births in their groups in 2006. Caucasian and Japanese women had significantly fewer proportions of births resulting from an unintended pregnancy.

Figure 1.19 State of Hawai'i, Unintended Live Births by Maternal Age, Resident Population: 2006



Source: Hawai'i State Department of Health, Pregnancy Risk Assessment Monitoring System, Hawai'i State Department of Health, Office of Health Status Monitoring. Comparisons of maternal a race were done to the distribution of 2006 births not presented in this report, but were similar to that for the 2007 birth distribution by maternal race presented in this report.

In 2006, unintended live births was higher than expected among women under 18, 18-19, 20-24, and 25-29 years of age compared to the proportion of total births in each groups. Women aged 35-39 and those 40 years of age and older had significantly fewer proportion of births resulting from an unintended pregnancy.

Prenatal Care

Issue:

Early participation in prenatal care is important to ensure a healthy pregnancy and optimal birth outcomes. Prenatal care includes three major components: risk assessment, treatment for chronic and newly diagnosed medical conditions, and education to target behaviors that reduce risk. The delay in prenatal care initiation lessens the opportunity to improve outcomes through the early identification of problems that could impact the pregnancy, and the early adoption of healthy pregnancy behaviors. Recent improvements in enrolling women into prenatal care during the first trimester are being undermined by increasing scarcity of providers and other issues that impact a woman's ability to access prenatal care.[2]

Healthy People 2010 Objective:

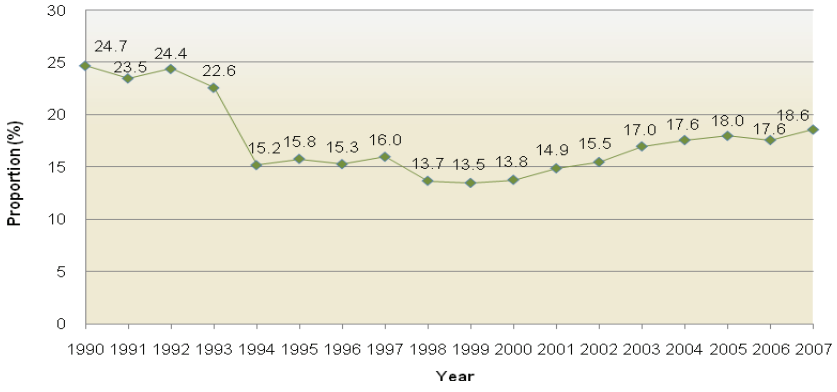
Increase the proportion of pregnant women who receive prenatal care in the first trimester of pregnancy to 90% (or 10% without prenatal care in the first trimester).

National Data:

Prenatal care utilization had risen fairly steadily from 1990 to 2003. Nationally, there are two different versions of the birth certificate in use. There are systematic differences in the way that these two birth certificates collect specific data so they are often separated out when reporting national data. As of January 1, 2006, 19 states had implemented the 2003 Revision representing approximately 49% of all births.[5] Some additional states have implemented the 2003 Revision, but in 2009, Hawai'i remains one of the states that still uses the old version. In 2006, the percentage of mothers who did not begin prenatal care in the first trimester of pregnancy using the 2003 Revision was 29.8%, while among those states using the unrevised birth certificate was 16.8%. These differences likely represent differences in the way the data was reported in the two versions and is likely not indicative of actual prenatal care utilization.

Hawai'i Data:

Figure 1.20 State of Hawai'i, Mothers without First Trimester Prenatal Care, Resident Population: 1990-2007

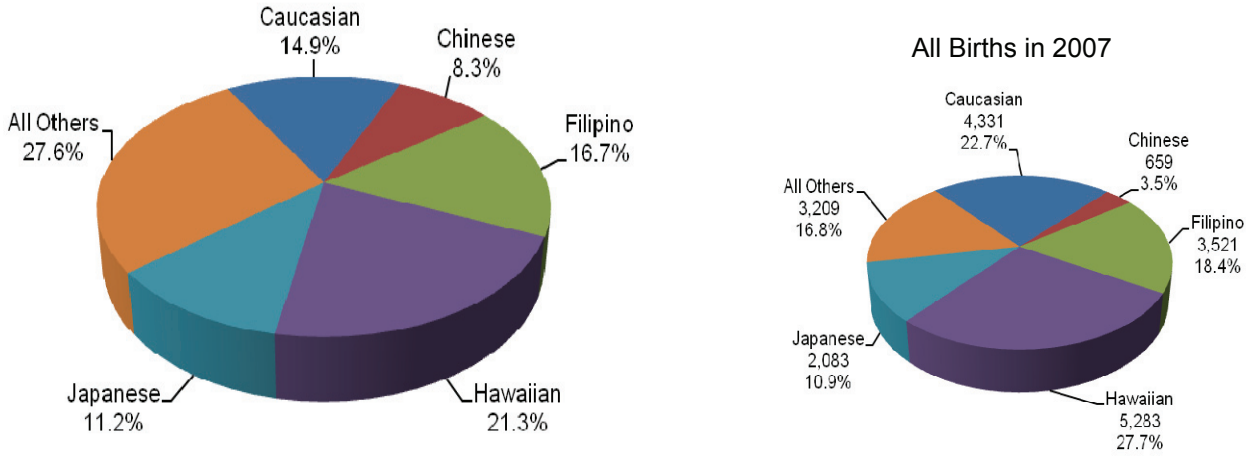


Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In Hawai'i, the proportion of mothers without first trimester prenatal care decreased significantly from 24.7% in 1990 to a low of 13.5% in 1999. However, the trend has steadily increased to 18.6% in 2007. Nationally, in 2006, the 32 state aggregate of those who reported unrevised birth certificate data showed that 16.8% of mothers did not have first trimester prenatal care with Hawai'i at 17.6% and not meeting the HP 2010 objective.

In an average week in Hawai'i:
68
infants are born who had no prenatal care or entered care after the first trimester

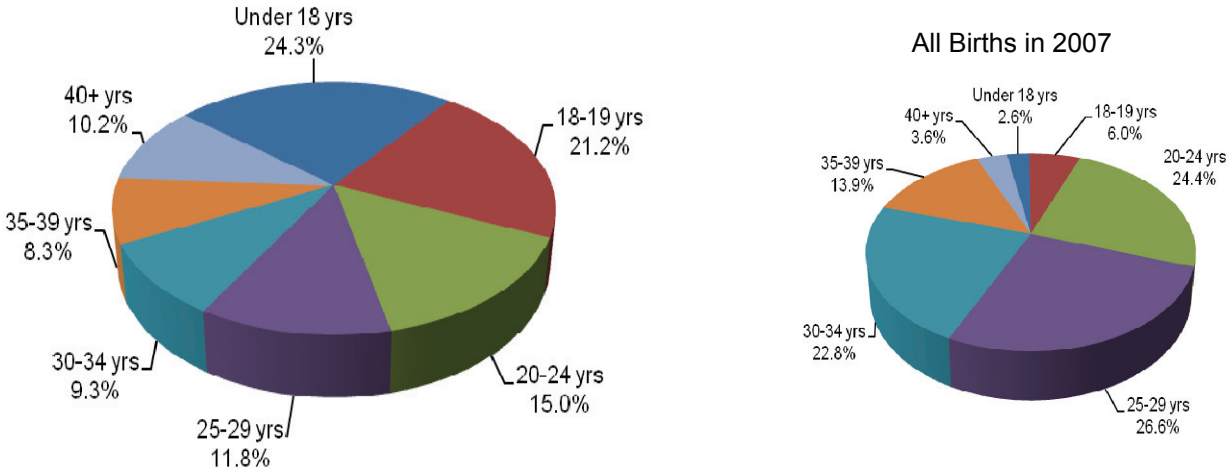
Figure 1.21 State of Hawai'i, No First Trimester Prenatal Care by Maternal Ethnicity, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, Chinese women made up 3.5% of all births, but accounted for 8.3% of those not accessing prenatal care in the first trimester. The "All Others" group is a composite of various ethnicities and makes up 27.6% of those not accessing prenatal care in the first trimester compared to just 16.8% of births. Whereas, 21.3% of Hawaiian women did not access prenatal care in the first trimester even though made up 27.7% of births. Additionally, 14.9% of Caucasian women did not access prenatal care in the first trimester yet made up 22.7% of births.

Figure 1.22 State of Hawai'i, No First Trimester Prenatal Care by Maternal Age, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, women under 18 years old, those 18-19 years old and those 40 and over were less likely to access first trimester prenatal care than expected when compared to the population of births in their respective groups. Although women under 18 years of age comprised only 2.6% of all live births, they accounted for 24.3% of those who did not access first trimester prenatal care. Similarly, women 18-19 years of age comprised only 6% of all births, they accounted for 21.2% of those who did not access first trimester prenatal care. Together, these two groups comprised only 8.6% of all births, but close to half of all those who did not access prenatal care in the first trimester.

Low Birth Weight

Issue:

Low birth weight (LBW) infants (defined as <2,500 grams at birth) are at increased risk for impaired development and infant death compared to those born of normal birth weight. LBW infants that survive are more likely to suffer from long-term disabilities such as cerebral palsy, blindness or other chronic conditions. Several potentially modifiable risk factors associated with LBW include: cigarette smoking, multiple gestation, poor nutrition, maternal age extremes, and short inter-pregnancy interval.[2]

Healthy People 2010 Objective:

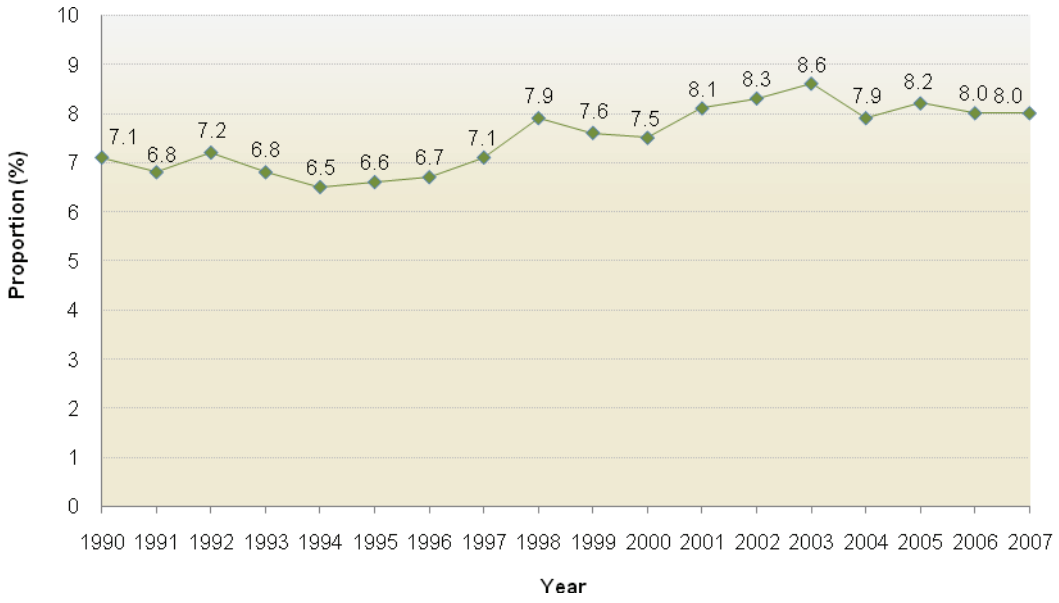
Reduce low birth weight births to no more than 5 percent of all live births.

National Data:

The LBW rate rose from 8.2 percent in 2005 to 8.3 percent in 2006, the highest level in four decades.[5] The percentage of infants born at less than 2,500 grams has risen 19 percent since 1990. All of the rise for 2005–2006 was among moderately LBW (1,500–2,499 grams) infants. There is no nationally specific data on the Native Hawaiian, individual Asian and other Pacific Islander groups for LBW births. However, in 2006, all Asian or Pacific Islander groups combined had 8.1% of births LBW, compared to 7.3% of non-Hispanic Whites and 14.0% of non-Hispanic Blacks.

Hawai‘i Data:

Figure 1.23 State of Hawai‘i, Low Birth Weight Births, Resident Population: 1990-2007

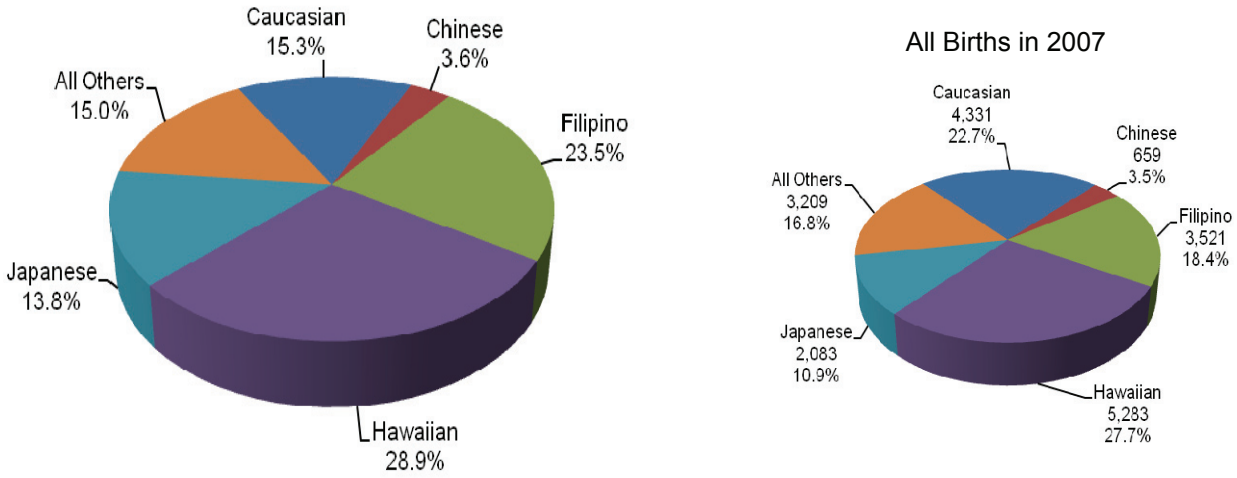


Since 1990, the proportion of LBW births in Hawai‘i has increased and accounted for 8% of all births in 2007, matching closely with the most recent national prevalence report,[5] and does not meet the HP 2010 objective.

Source: Hawai‘i State Department of Health, Office of Health Status Monitoring.

In an Average week in Hawai‘i:
29
babies are born low birth weight

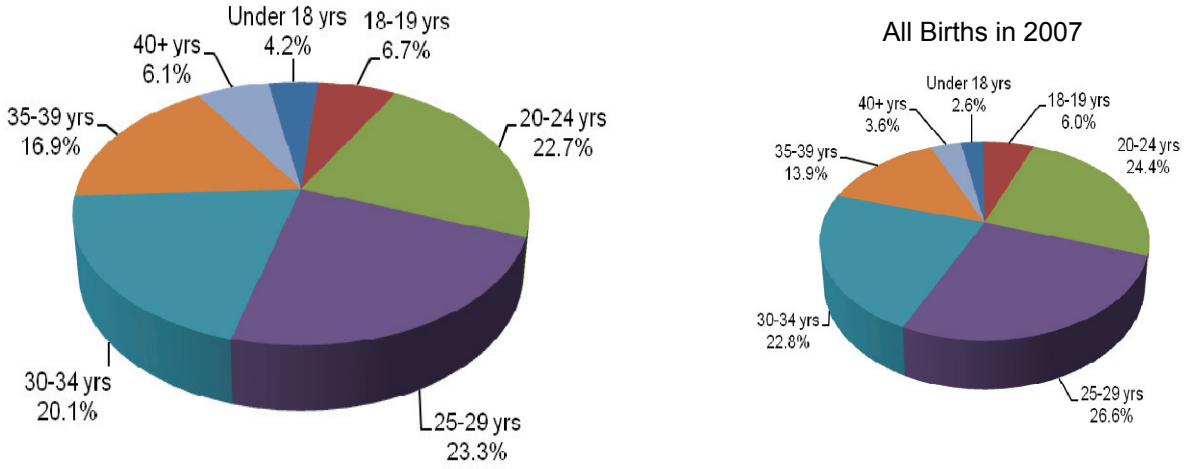
Figure 1.24 State of Hawai'i, Low Birth Weight Births by Maternal Ethnicity, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, Hawaiian (28.9%), Filipino (23.5%), and Japanese (13.8%) women were more likely to have a low birth weight (LBW) infant than expected compared to the proportion of live births (27.7%, 18.4%, and 10.9%, respectively. Whereas, Caucasian women (15.3%) were less likely to have a LBW infant than expected compared to their respective proportion of live births (22.7%).

Figure 1.25 State of Hawai'i, Low Birth Weight Births by Maternal Age, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, women under 18, 18-19, 35-39, and 40 years of age and older were more likely to have a LBW infant than expected when compared to the population of births in their groups (2.6%, 6.0%, 13.9%, and 3.6%, respectively). Those 20-24 years of age had 22.7% of the LBW births, but made up 24.4% of all births. Those 25-29 years of age had 23.3% of LBW births, compared to 26.6% of all births.

Prematurity

Issue:

Prematurity is the leading cause of neonatal deaths and often associated with birth defects and long term health problems. Prematurity is defined as <37 weeks of gestation. Reduction in preterm delivery holds great promise for overall reduction in infant illness, disability, and death. Some risk factors for prematurity include a prior preterm birth, spontaneous abortion, low pre-pregnancy weight, and the use of alcohol, tobacco, or other drugs during pregnancy. However, it is estimated that these risk factors account for only one-third of all preterm births.[2]

Healthy People 2010 Objective:

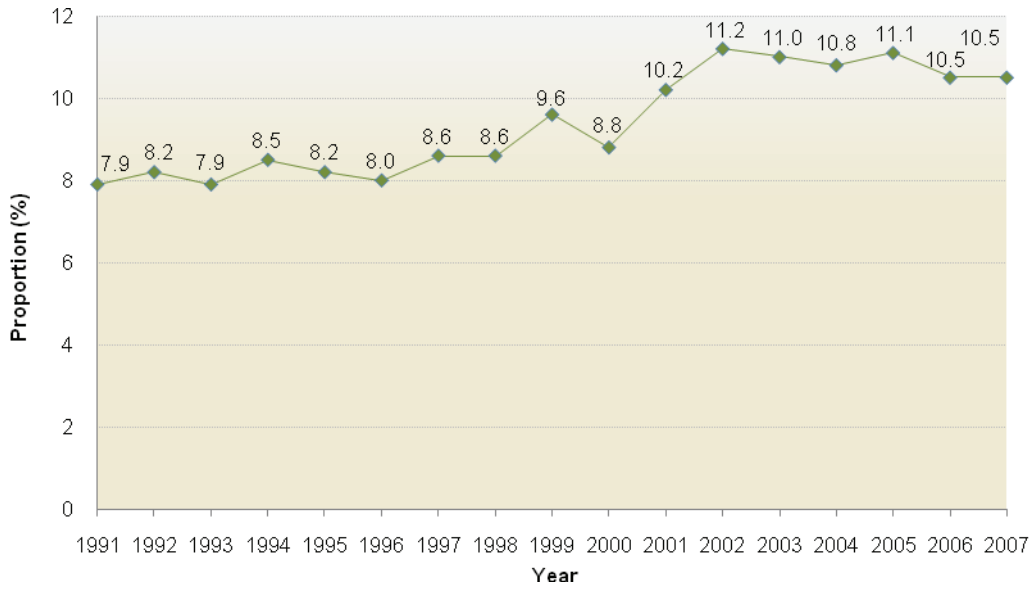
That no more than 7.6% of all births be preterm (<37 weeks of gestation) with no more than 1.1% of all births being very preterm (<32 weeks of gestation).

National Data:

The estimated national rate of preterm birth changed little from 12.7% in 2005 to 12.8% in 2006.[5] Overtime, the proportion of births delivered preterm rose by more than 20 percent since 1990, and by 36 percent since the early 1980s. Moderate preterm births (34-36 weeks gestation) accounted for 9.2% of births in 2006, whereas 1.6% of births were completed after 32-33 weeks of gestation nationally. There is no nationally specific data on the Native Hawaiian, Asian, and Pacific Islander groups for preterm births. However, the Asian or Pacific Islander combined group shows that 10.9% of births were preterm in 2006, compared to 11.7% of non-Hispanic Whites and 18.5% of non-Hispanic Blacks.

Hawai‘i Data:

Figure 1.26 State of Hawai‘i, Preterm Births, Resident Population: 1991-2007

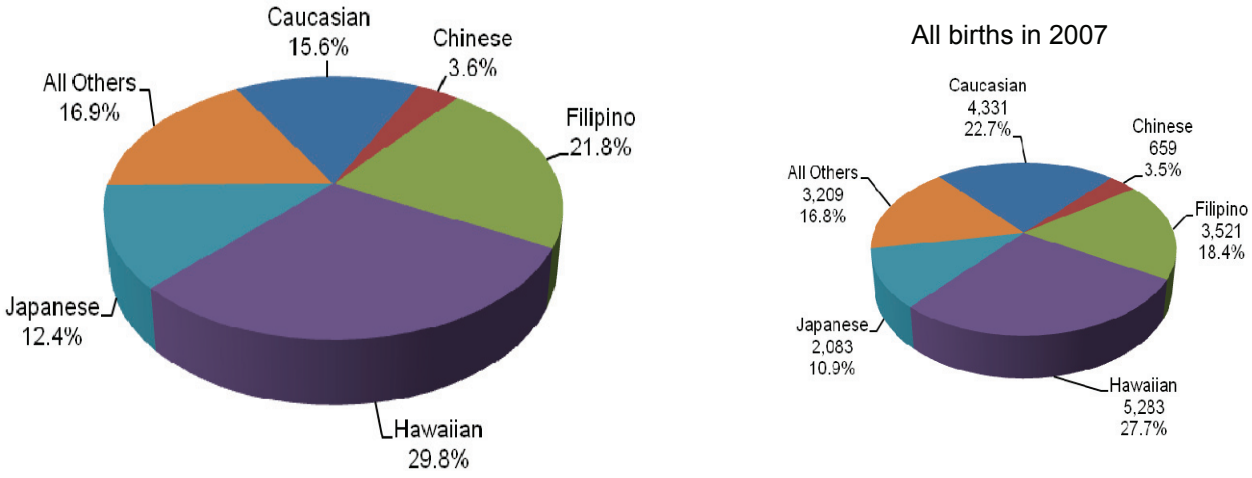


In Hawai‘i, the rate of preterm delivery was consistent from 1991 to 2000 at 8-9% of all births, but increased dramatically to 10-11% where it has remained. In 2007, in Hawai‘i, 10.5% of all births were preterm with 4.6% of all births born at 36 weeks gestation, 3.5% born at 34-35 weeks, 1.1% born at 32-33 weeks, and 1.4% born at less than 32 weeks.

Source: Hawai‘i State Department of Health, Office of Health Status Monitoring. Preterm Delivery rate not available for 1990.

In an Average week in Hawai‘i:
39
infants are born preterm

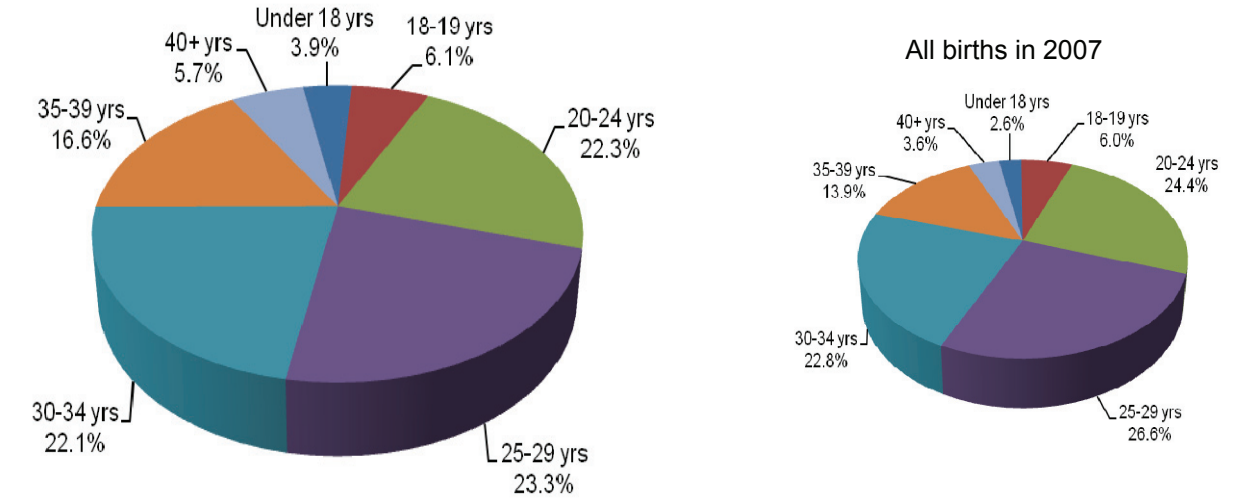
Figure 1.27 State of Hawai'i, Preterm Births by Maternal Ethnicity, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, based on maternal race, Caucasian Mothers had fewer preterm deliveries than expected. Hawaiian mothers had 29.8% of preterm deliveries compared to 27.7% of all births. Filipino mothers had 21.8% of preterm deliveries compared to 18.4% of all births. Japanese mothers had 12.4% of all preterm deliveries, compared to 10.9% of all births. Caucasian mothers had 15.6% of preterm deliveries much less than the 22.7% of all births they represent.

Figure 1.28 State of Hawai'i, Preterm Births by Maternal Age, Resident Population: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

In 2007, Mothers 20-24 and 25-29 years of age had smaller proportion of preterm births compared to the proportion of live births in their respective age groups. Mothers under 18 years of age had 3.9% of the preterm births compared to 2.6% of all births. Those 35-39 years of age had 16.6% of preterm births compared to 13.9% of all births. Mothers 40 years and older had 5.7% of preterm births compared to 3.6% of all births. For the mothers 20-24 years of age, they made up 22.3% of preterm births, compared to 24.4% of all births. While those 25-29 years of age had 23.3% of preterm births compared to 26.6% of all births.

WOMEN AND INFANT HEALTH

- Intended Pregnancy
- Prenatal Care
- Alcohol during Pregnancy
- Smoking during Pregnancy
- Low Birth Weight
- Infant Safe Sleep Environment
- Breastfeeding
- Chlamydia
- Preventive Screening
- Violence Against Women

Intended Pregnancy

Goal: To Increase the Proportion of Intended Pregnancies

Issue:

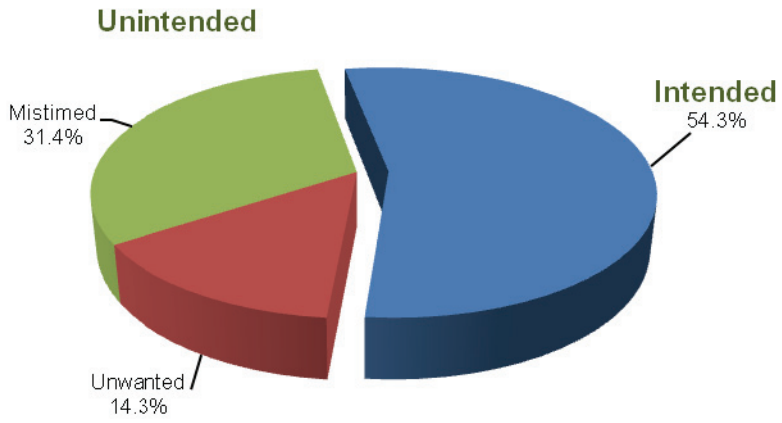
Unintended pregnancy is associated with late or inadequate prenatal care, low birth weight, neonatal death, domestic violence, child abuse, and exposure of the fetus to harmful substances like tobacco, alcohol, and other drugs. It is also associated with economic hardship, marital dissolution, and failure to achieve educational goals.[2]

Healthy People 2010 Objective:

Increase the proportion of pregnancies that are intended to 70% (or decrease unintended pregnancies to 30%).

Population Based Data:

Figure 2.1 State of Hawai'i, Intendedness of Pregnancy among Live Births, Resident Population: 2004-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Pregnancy Risk Assessment Monitoring System.
Note: PRAMS data is only based on pregnancies that resulted in a live birth and does not include miscarriages, fetal deaths, and induced terminations of pregnancy.

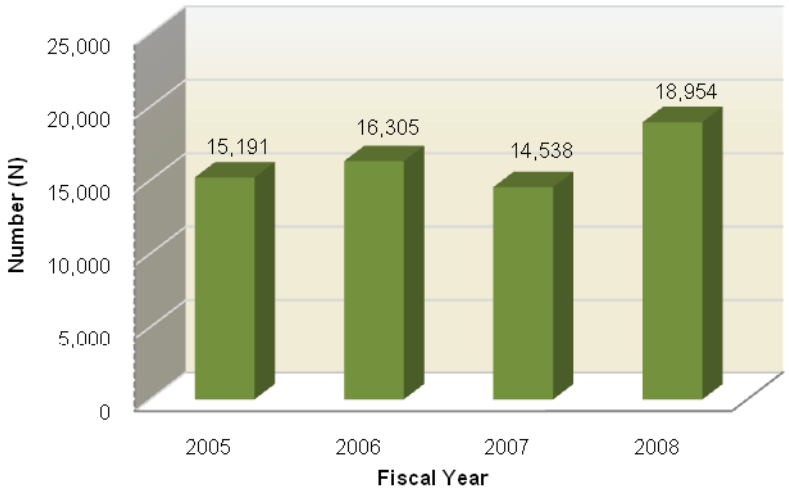
In 2003, among the 19 states who reported PRAMS data, the rate of an intended pregnancy for women who had recently given birth ranged from 48.1% in Louisiana to 66.5% in Maine with the rate in Hawai'i being 56.2%.[6]

There has been little change in Hawai'i since 2003. In Hawai'i data aggregated from 2004-2007, 54.3% of pregnancies that resulted in a live birth were intended which does not meet the HP 2010 objective. Among the unintended pregnancies, the majority were classified as mistimed (31.4%) with the remainder being unwanted (14.3%).

Program Highlight:

Figure 2.2 Clients Receiving Family Planning Services in Family Planning Program Funded Clinics: 2005-2008

The **Family Planning Program** (FPP) in the Maternal and Child Health Branch (MCHB) assures access to affordable birth control and reproductive health services to all individuals of reproductive age with a priority on low income and hard-to-reach individuals (uninsured or underinsured persons, immigrants, males, persons with limited English proficiency, homeless persons, substance abusers, persons with disabilities, and adolescents). Services are offered free or at low cost and include education, counseling, cervical and breast exams, provision of appropriate contraceptive methods, testing for pregnancy and sexually transmitted infections. FFP contracts with 20 providers, offering services in 39 clinics and community sites statewide. In FY 2008, approximately 18,954 clients were served by the FPP, and represented a large increase from previous years.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Family Planning Program. Data reflects Fiscal year (July 1-June 30).

The Family Planning Program (FPP) also provides other services to address unintended pregnancy including:

- Performing family planning need assessments in rural and low socio-economic communities
- Providing professional training and technical assistance to family planning providers through annual conferences that feature updates on research, methods and practices for family planning
- Providing family planning community education and outreach services through a statewide network of health educators to provide information and conduct presentations in schools and hard to reach groups

Other Program Activities:

- All Perinatal Program health services contracts including **Perinatal Support Services** and the **Big Island Perinatal Health Disparity Project** provide services and support women during the interconception period to improve health outcomes including family planning services to increase birth spacing and the reduction of unintended pregnancy
- The **WIC** program for low-income women and their young children also follow women during the interconception period to promote optimal health outcomes including the reduction of future unintended pregnancies.

Prenatal Care

Goal: To Ensure Early Entrance into Prenatal Care

Issue:

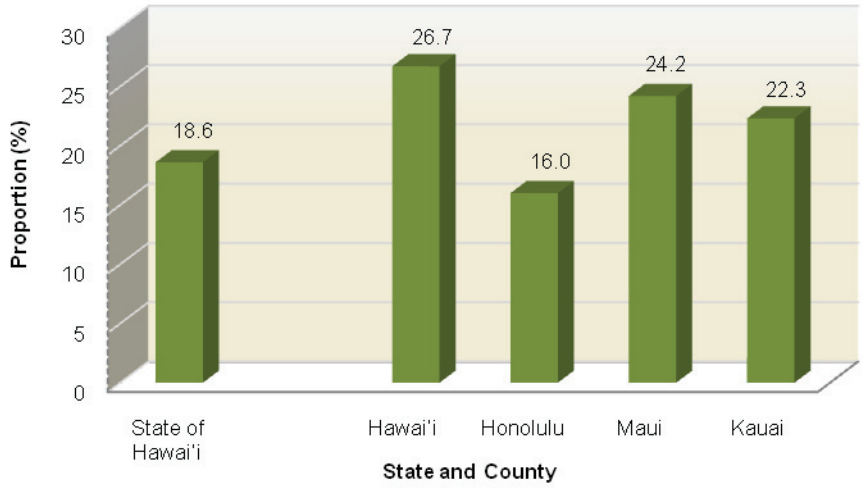
Early identification of maternal disease and risks for complications of pregnancy or birth are the primary reasons for first trimester entry into prenatal care. This can help ensure that women with complex problems and women with chronic illness or other risks are seen by specialists if required. Early high-quality prenatal care is critical to improving pregnancy outcomes.[2]

Healthy People 2010 Objective:

Increase the proportion of pregnant women who receive prenatal care in the first trimester of pregnancy to 90% (or 10% without prenatal care in the first trimester).

Population Based Data:

Figure 2.3 State of Hawai'i, No First Trimester Prenatal Care by County, Resident Population: 2007



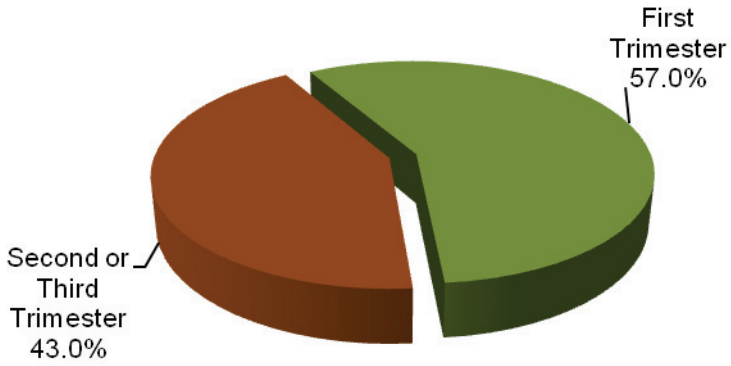
In 2005, 16.1% of mothers did not receive first trimester prenatal care nationally and 18.0% of mothers in Hawai'i.[5] In 2007, 18.6% of mothers in Hawai'i did not receive first trimester prenatal care. There are significant disparities by county with rates in Honolulu almost 10 percentage points lower than found in the neighboring counties with no county meeting the HP 2010 objective in 2007.

Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

Program Highlight:

Figure 2.4 Enrollment into Prenatal Care by Trimester, Big Island Perinatal Health Disparities Program: 2006-2007 (N=192)

The Maternal and Child Health Branch's **Big Island Perinatal Health Disparities Project** (BIPHDP) is a federally funded program to address disparities in perinatal health and birth outcomes among specific populations on the Big Island. Native Hawaiian, other Pacific Island and Hispanic women, and adolescent females residing on the Big Island (regardless of ethnicity) all have poorer overall perinatal health and birth outcomes than do Big Island women of other ethnicities. The BIPHDP provides several support services to pregnant women of the target populations in an effort to eliminate these disparities.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Big Island Health Disparities Program.
Note: Analysis is preliminary data extracted in February 2009, and is limited to those with a live birth or fetal death who entered the BIPHDP program during the 2006-2007 Calendar Year and had valid information on gestational age of infant at birth.

Overall, 57% of women in the BIPHDP program during 2006-2007 entered prenatal care in the first trimester which is below the statewide and Hawai'i County averages in 2006. This program focuses on high risk groups and the data reflects that the program is targeting an appropriate group in need of services.

The BIPHDP works with four Local Area Consortia (LAC). Each LAC participates in health fairs and other public gatherings within their local communities, providing information on pregnancy, the importance of early prenatal care, as well as describing the services available through the BIPHDP. In addition, the East Hawai'i LAC (servicing the Hilo/Puna communities) recently began to run a series of articles in the Hawai'i Tribune Herald describing the project and the need for prenatal care.

The BIPHDP also provides project participants with risk assessment, case management, health education, home visiting, and anticipatory counseling and guidance to augment and reinforce the medical prenatal care they receive. Examples of how the program increases the number of women accessing early prenatal care include assistance with navigating the health insurance application process, finding a prenatal care provider, transportation, and translation services.

Other Program Activities:

- The WIC program for low-income women and their young children determines if all pregnant participants have established prenatal care in a health maintenance organization, clinic, or private physician upon enrollment into WIC. Women who do not have prenatal care are referred to local provider(s) or to Medicaid if she needs insurance coverage. Some of the local WIC agencies are co-located with community health centers and can easily access prenatal care in the same location. Data from the 2007 Pregnancy Nutrition Surveillance System (PNSS) indicated 74.3% of Hawai'i WIC clients had entered prenatal care in their first trimester compared to the average of 79.4% for those in the 2007 PNSS.[7]

Alcohol During Pregnancy

Goal: To Increase Abstinence from Alcohol Among Pregnant Women

Issue:

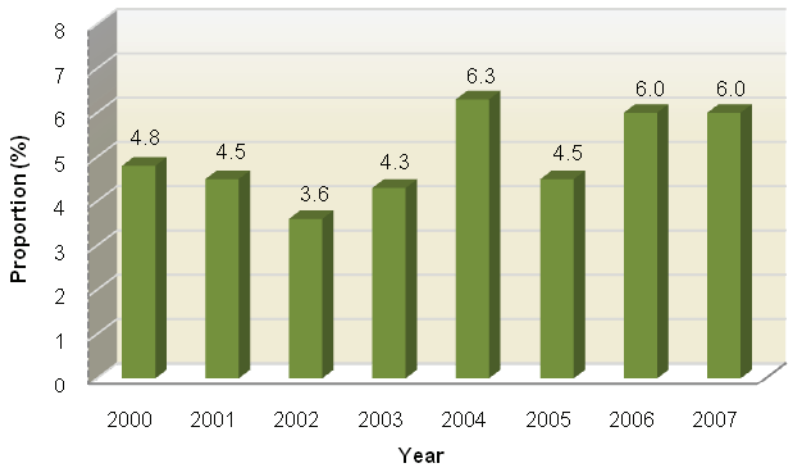
A range of harmful effects, including stillbirth, low birth weight, preterm delivery, and fetal alcohol syndrome have been associated with prenatal use of alcohol. Any consumption of alcohol at anytime during pregnancy is considered unsafe to the developing fetus and research has found a particularly high risk in those that drink early in pregnancy. About 1 in 12 pregnant women in the United States report alcohol use. And about 1 in 30 pregnant women in the United States reports binge drinking (having five or more drinks at one time).[2,8]

Healthy People 2010 Objective:

Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women. Increase abstinence from alcohol to 94%. Increase abstinence from binge drinking to 100%.

Population Based Data:

Figure 2.5 State of Hawai'i, Proportion of Women who Report Alcohol Use during Pregnancy: 2000-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Pregnancy Risk Assessment Monitoring System.

In 2003, among the 19 states who reported PRAMS data, the rate of an intended pregnancy for women who prevalence of abstinence from alcohol during the last 3 months of pregnancy ranged from 91.3% in Colorado to 98.0% in Utah with Hawai'i having 95.7% abstaining.[6]

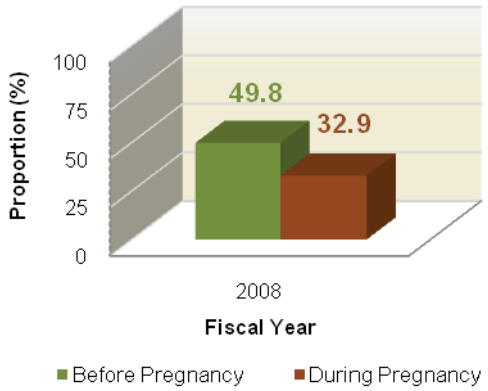
In Hawai'i, approximately 6% of women reported using alcohol during their pregnancy in 2007. This is almost a two-fold increase from 2002, when only 3.6% of women reported using alcohol during their pregnancy. Hawai'i, however, has met the HP 2010 objective of increasing abstinence from alcohol.

Program Highlight:

Figure 2.6 Clients Reporting Alcohol Use before and during Pregnancy in Baby S.A.F.E. Program: 2008 (N=324)

The Baby S.A.F.E. Program in the Maternal and Child Health Branch has goals to prevent all types of substance abuse in pregnancy including alcohol. Baby S.A.F.E. Program services include providing:

- Community outreach in counties and communities with high rates of substance abuse including alcohol use in pregnancy
- Health education and harm reduction counseling to pregnant women with a substance abuse problem including alcohol use
- Substance abuse screening to pregnant women at WIC, community health centers, and other community agencies
- Referrals for substance abuse treatment, behavioral health counseling, and prenatal care as necessary
- The data demonstrates a reduction by 34% in reported alcohol use in Baby S.A.F.E. clients. Further work is needed as these high risk women have estimates higher than statewide



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Baby S.A.F.E. Program. Data reflects Fiscal year (July 1-June 30). Alcohol use only captured in database for clients discharged from the program (live birth, fetal death, interruption of pregnancy), and thus doesn't capture those who are lost to follow up.

Other Program Activities:

- Programs throughout the division including Perinatal Support Services, Family Planning, the Big Island Perinatal Health Disparity Project, and WIC routinely screen and provide appropriate referral services for alcohol use.
- Preventing the consumption of alcohol by pregnant women is a major goal of the Fetal Alcohol Spectrum Disorders (FASD) program. FASD describes the range of adverse health effects that can occur in a child whose mother drank alcohol during pregnancy. Effects include physical, mental, behavioral, and/or learning disabilities that may have lifelong implications for the child's well-being. The only cause for FASD is the consumption of alcohol by women during their pregnancy.
    - The Division FASD coordinator works closely with a task force comprised of private/public partners to build a system of services to prevent FASD. Activities include completion of a needs assessment, increasing awareness through trainings and publications on FASD, supporting warning signage about the dangers of alcohol consumption during pregnancy, encouraging more screening to identify children with FASD, working with national experts to support community based perinatal screenings.

Smoking During Pregnancy

Goal: To Increase Abstinence from Smoking Among Pregnant Women

Issue:

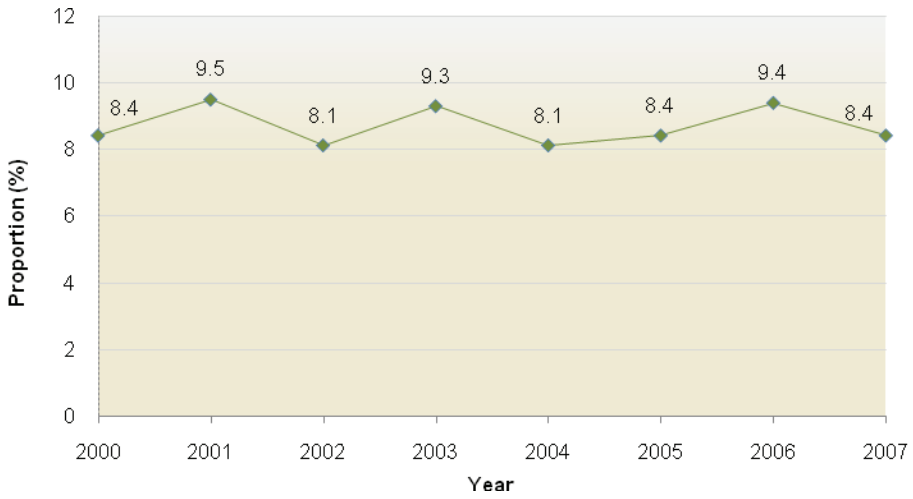
Birth weight is the single most important determinant of a newborn's survival during the first year. Maternal smoking during pregnancy has been directly related to low birth weight. A range of harmful effects, including stillbirth, low birth weight and preterm delivery have been associated with prenatal use of tobacco.[2]

Healthy People 2010 Objective:

Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women. Increase abstinence from cigarette smoking to 98%. Increase smoking cessation during pregnancy.

Population Based Data:

Figure 2.7 State of Hawai'i, Smoking during the Last 3 Months of Pregnancy, Resident Population: 2000-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Pregnancy Risk Assessment Monitoring System.

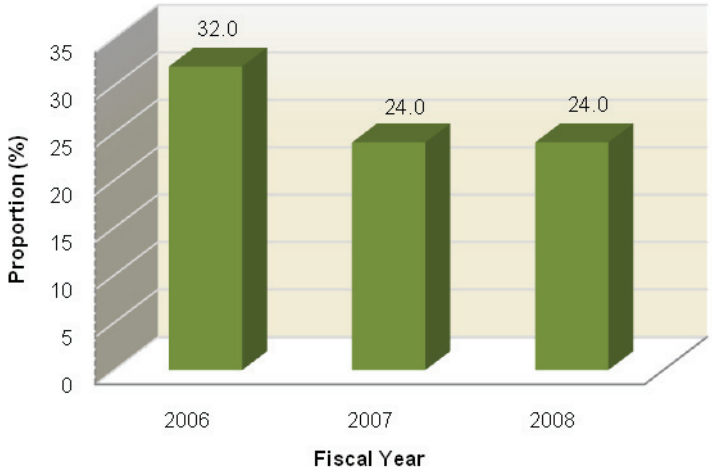
In 2003, prevalence of abstinence from smoking during the last 3 months of pregnancy in the 19 states reporting PRAMS data for smoking ranged from 72.5% in West Virginia to 96.1% in Utah with Hawai'i having 90.7% abstaining.[6]

There has been little change in self-reported smoking during the last 3 months of pregnancy since 2000. In 2007, an estimated 8.4% of pregnant women Hawai'i reported smoking and does not meet the HP 2010 objective.

Program Highlight:

Figure 2.8 Client Screening for Smoking during Pregnancy in Perinatal Support Services Program: 2006-2008

The Maternal and Child Health Branch's Perinatal Health Program contracted service providers receive training in Brief Intervention utilizing the 5 A's (ask, advise, assess, assist and arrange) approach to decrease the smoking rates in pregnancy.[9] Perinatal Support Services (PSS) contractors provide health education on the harmful effects of smoking on the developing fetus and harm reduction advice for pregnant women unable to discontinue or avoid cigarette smoking. Motivational interviewing techniques are used to encourage healthy behaviors throughout the pregnancy and up to 6 months post-partum. In FY 2006, 32% of the 1,200 clients who were screened reported smoking during pregnancy. This proportion has declined over time with about 24% of clients reporting smoking during their pregnancy in FY 2008, while the numbers of clients screened has increased to 1,777 in FY 2008. PSS provides services to high risk clients with higher rates of smoking than seen in the general population of women in Hawai'i confirming the need to serve these women.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Perinatal Support Services Program. Data reflects Fiscal year (July 1-June 30) and there was a significant change in the method of data collection during FY2006 and FY 2007. Use caution when comparing FY 2008 to previous data.

Other Program Activities:

- All Perinatal Program health service contracts including PSS, Baby Safe, Family Planning, and the Big Island Perinatal Health Disparity Project perform these activities to discourage smoking in pregnancy:
  - Screen all pregnant women for cigarette smoking and other tobacco exposure in the living environment
  - Use the Brief Intervention method for those that screen positive for cigarette smoking to assess what stage of change the participant is currently in
  - Use Motivational Interviewing techniques to encourage pregnant women to quit smoking cigarettes and/or adopt harm reduction behaviors
  - Case-manage and follow-up with participants throughout pregnancy and up to six months post-partum to prevent relapse of smoking behavior and continue to provide support
- The **WIC** program routinely screens for tobacco use which includes second hand smoke within the home in all enrolling participants. All participants are informed of the dangers of tobacco use during pregnancy and provided with appropriate community referrals.

Low Birth Weight

Goal: To Reduce the Number of Low Birth Weight Births

Issue:

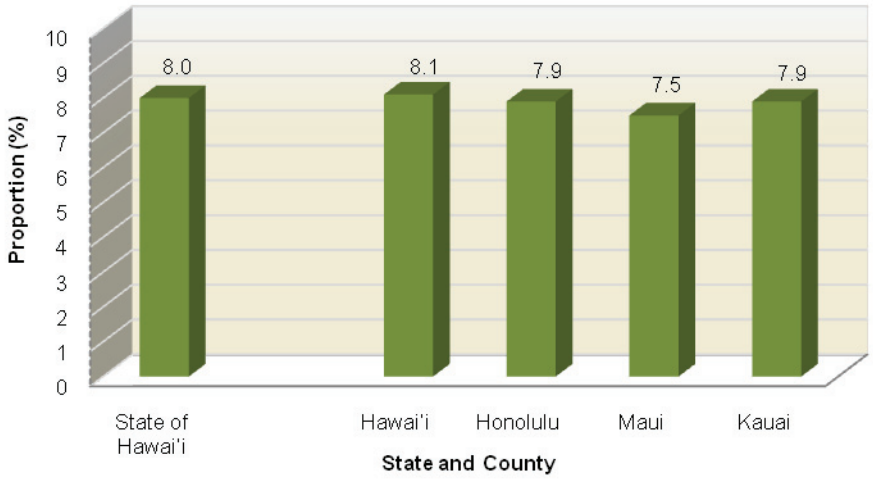
Low birth weight (LBW) is the strongest predictor of infant death. The category of LBW (<2500 grams or <5.5 pounds) generally includes pre-term infants and infants with intrauterine growth retardation. Many risk factors have been identified for LBW including: both young and old maternal age, poverty, late prenatal care, smoking, substance abuse, and multiple gestations. Early identification and prevention of risk factors in the first place are targeted areas for prevention programs.[2]

Healthy People 2010 Objective:

Reduce low birth weight births to no more than 5 percent of all live births.

Population Based Data:

Figure 2.9 State of Hawai'i, Low Birth Weight by County, Resident Population: 2007



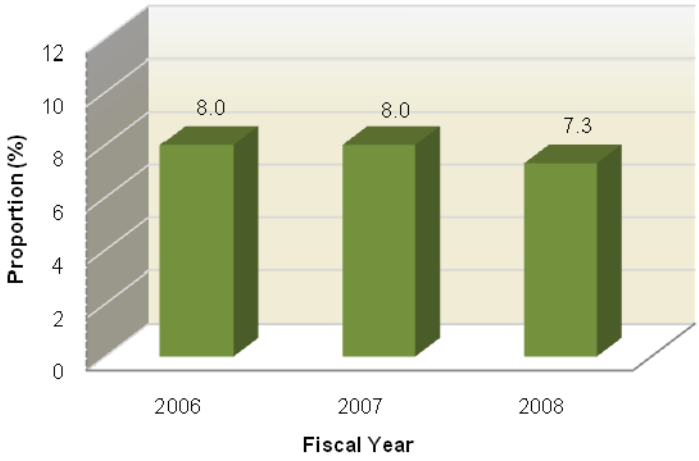
Nationally, 8.3% of infants were classified as low birth weight in 2006.[5] There has been little change in Hawai'i since 2001, with an estimated 8.0% of infants LBW in 2006 and 2007, about the same as the national rate of 8.3% in 2006. There was little difference by county of residence in LBW births in Hawai'i in 2007 with no counties meeting the HP 2010 objective.

Source: Hawai'i State Department of Health, Office of Health Status Monitoring.

Program Highlight:

Figure 2.10 Low Birth Weight among Perinatal Support Services Clients: 2006-2008

The Maternal and Child Health Branch's Perinatal Health Programs provide support services to high-risk pregnant women to prevent preterm birth and the resulting low-birth weight infant. **Perinatal Support Services (PSS)** are located at 10 sites across the counties of Honolulu, Maui, and Kauai. Pregnant women are screened for social, health and medical conditions and receive individual or group health education to address high risk factors that contribute to the incidence of preterm birth and low-birth weight infants. The rates of LBW PSS are similar to the overall state rate and suggest a significant impact by the program in these women who generally should be at higher risk than the state in general.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Perinatal Support Services Program.
Note: Data reflects Fiscal year (July 1-June 30) and there was a significant change in the method of data collection during FY2006 and FY 2007. Use caution when comparing FY 2008 to previous data.

Other Program Activities:

- **WIC** conducts screening and provides one on one counseling for pregnant women to facilitate healthy behaviors (ideal weight gain, smoking cessation, abstinence of alcohol and/or drugs, adequate diet and referrals to community resources) associated with ideal birth weights. Data from the 2007 Pregnancy Nutrition Surveillance System indicated 7.4% of Hawai'i WIC clients had low-birth weigh infants compared to the national average of 7.1%.[7]
- The **Women's Health Section** within the MCHB contracts with the Healthy Mothers Healthy Babies (HMHB) Coalition of Hawai'i to facilitate Perinatal Health Program trainings, needs assessment and meetings with statewide contracted Perinatal Providers and stakeholders to ensure healthier birth outcomes. HMHB is also the contract provider for the statewide MothersCare Information and Referral phone line and website. HMHB staff provide:
    - Assistance to uninsured pregnant women in completing the MedQuest application for health insurance and access to care
    - Referrals and resources for various perinatal issues (e.g. WIC, Lactation Consultant, Doula)
    - Tracking and monitoring of perinatal legislation
- The Division held a statewide **Perinatal Summit** on the Big Island of Hawai'i in October 2008 that was attended by about 175 people. The Summit was a platform to highlight State perinatal data and the areas of perinatal health that need more focus and improvement. Keynote speakers included national leaders in the field of perinatal health research: Dr. Hani Atrash and Dr. Michael Lu who spoke about the importance of preconception and interconceptual health of women for healthier birth outcomes.
    - A compendium of fact sheets related to preconception, interconception, and perinatal health produced by the division were distributed at the summit. The issues selected were preconception vitamin use, unintended pregnancy, prenatal care, perinatal substance abuse, cesarean delivery, Medicaid/QUEST birth outcomes, breastfeeding, infant sleep positioning, and postpartum depression.

Infant Safe Sleep Environment

Goal: To Reduce Infant Deaths Due to Unsafe Sleep Environments

Issue:

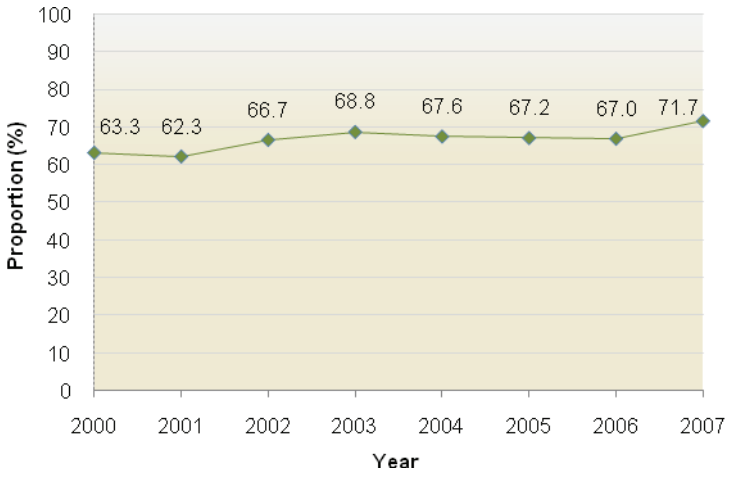
Suffocation is the leading cause of fatal injury in infants below one year of age. Suffocation occurs because of unsafe sleeping positions and practices. Research has shown that placing an infant to sleep on his back can reduce the risk of death from suffocation and Sudden Unexpected Infant Death (which may include Sudden Infant Death Syndrome or SIDS). Other safe sleep practices include using safety-approved cribs, keeping the car and home smoke-free, keeping pillows, soft bedding or toys out of the crib, keeping infants in cribs to sleep (and not in adult beds), and not overdressing infants when they sleep.[10]

Healthy People 2010 Objective:

Increase the proportion of infants placed on their backs to sleep to 70%.

Population Based Data:

Figure 2.11 State of Hawai'i, Back Sleeping Position, Resident Population: 2000-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Pregnancy Risk Assessment Monitoring System.

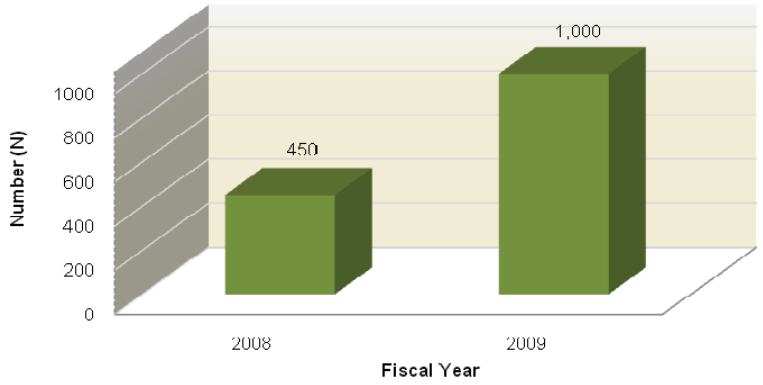
In 2004, SIDS was responsible for 8% of deaths among infants below one year of age, ranking it the 3rd leading cause of death, after birth deformities (19.5%) and prematurity/low birth weight (16.6%).[11] In 2007, there were 17 sleep-related infant deaths reported in vital statistics in Hawai'i.

In 2003, in the 19 states reporting PRAMS data for putting their healthy, full term infants to sleep on their backs ranged from 50% in Arkansas to 78.7% in Washington with Hawai'i having a rate of 68.8%.[6]

In Hawai'i, there has been steady improvement in sleep positioning since 2000 with an estimated 72% placing their infants to sleep on their backs in 2007 and meets the HP 2010 objective.

Program Highlight:

Figure 2.12 Number of Safe Sleep DVDs Distributed: FY 2008-2009



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch.
Note: Data reflects Fiscal year (July 1-June 30).

The Maternal and Child Health Branch (MCHB) provides leadership for the statewide **Safe Sleep Committee** to promote saving infants' lives through safe sleep policies and education for parents, teachers, doctors, nurses, and other caregivers. Safe Sleep Committee members consist of representatives from the Department of Health (DOH) Injury Prevention and Control Program, Department of Education, Department of Human Services, hospitals, the military, child care agencies, and the community.

The Safe Sleep DVD provides information on safe sleeping conditions including position, smoke-free environment, clothing that is not too warm, firm sleeping surfaces (in cribs) that are free of pillows, toys and soft bedding, and bed sharing. In FY 2008 and FY 2009, almost 1,500 Safe Sleep DVDs were distributed statewide to community organizations, hospitals and health professionals to share with families, parents (including teen parents), and caregivers.

Other activities of the Safe Sleep Committee include:

- Assisted 3 major birthing hospitals on Oahu to develop safe sleep policies and conduct training for staff. Other Oahu and neighbor island hospitals are working on developing policies or standing orders, and staff training.
- In FY 2008, over 30 community educational sessions on safe sleep were conducted for nearly 2,000 parents and agency staff who work with infants.
- In FY 2009, approximately 5,250 people were provided Safe Sleep information at public events held at the Bishop Museum, Blaisdell Exhibition Center, and at Children and Youth Day.
- In FY 2009, over 600 "Keep Me Safe When I Sleep" flyers were distributed through the Department of Human Services to licensed infant and child care providers.
- All parents of the approximately 18,000 infants born each year at birthing hospitals in Hawai'i receive the Keiki O' Hawai'i informational packet published by the Division which includes the "Keep Me Safe When I Sleep" information.

Other Program Activities:

- **MCHB** monitors safe sleep infant practices of new mothers through the Hawai'i Pregnancy Risk Assessment Monitoring Survey to educate health and child care providers as well as the public about the importance of Safe Sleep practices.
- The MCHB administers the **Child Death Review Committee** (CDR) and reviews sleep-related deaths in infants and provides recommendations to stakeholders on prevention approaches. The Committee is staffed and convened by Division staff. As a result of a CDR recommendation, Domestic Violence shelters were surveyed and several were found to have no policy or provision for safe sleep practices. Educational information was provided and the Hawai'i State Coalition Against Domestic Violence purchased portable cribs for use in the shelters.
- **WIC** routinely screens for tobacco use which includes second hand smoke within the home in all enrolling participants due to its association with infant deaths. All participants are informed of the dangers to infants of tobacco use in the household and provided with appropriate community referrals.

Breastfeeding

Goal: To Increase the Percent of Mothers who Breastfeed Their Infants

Issue:

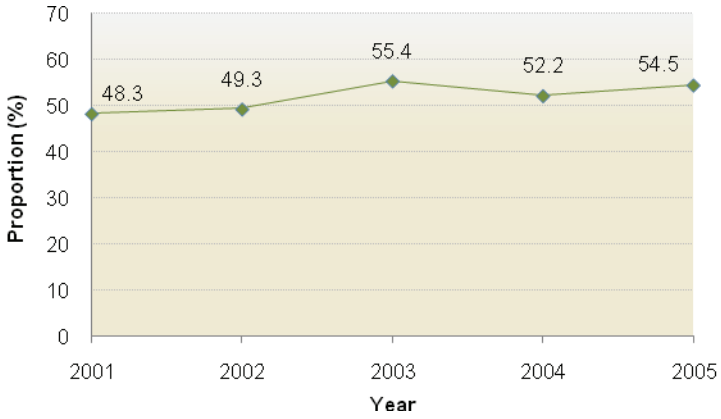
Human milk is the preferred feeding for all infants, including premature and sick newborns. Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first 6 months after birth. The advantages of breastfeeding are indisputable and include nutritional, immunological and psychological benefits to both mother and infant, as well as economic benefits.[2]

Healthy People 2010 Objective:

Increase the proportion of mothers who breastfeed their babies through 6 months to 50%.

Population Based Data:

Figure 2.13 State of Hawai'i, Breastfeeding at 6 Months, Resident Population: Birth Cohorts: 2001-2005



Source: Centers for Disease Control and Prevention. National Immunization Survey, 2000-2005 Birth Cohorts. Provisional Data for Hawai'i. http://www.cdc.gov/breastfeeding/data/NIS_data. Accessed March 27, 2009.

In children born in 2001, an estimated 48.3% mothers breastfed their infants for 6 months in Hawai'i. For children born in 2005, 54.5% of Hawai'i mothers reported breastfeeding for 6 months, surpassing the national percentage (43.1%), and exceeding the Healthy People 2010 objective of 50%.[12]

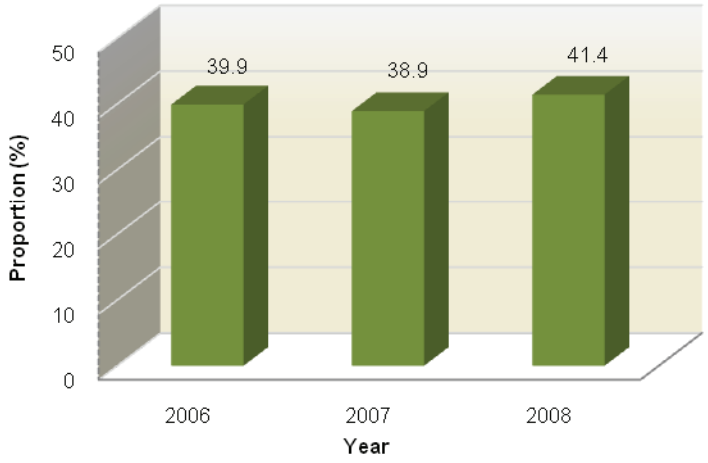
Based upon 2007 Breastfeeding report card produced by the CDC, Hawai'i is only one of four states (Maine, Hawai'i, Montana, and Utah) that achieved all three HP 2010 breastfeeding objectives - 75% of mothers initiating breastfeeding, 50% of mothers breastfeeding their infant at 6 months of age, and 25% of mothers breastfeeding their infant at 12 months of age.[13]

Program Highlight:

Figure 2.14 State of Hawai'i, Breastfeeding at 6 Months among Mothers in the WIC Program who Initiated Breastfeeeding: 2006-2008

The Supplemental Nutrition Program for **Women, Infants and Children (WIC)** is a federally funded program which provides low-income women and their children up to age 5 with nutritious supplemental foods, nutrition counseling, and support services.

Because a major goal of the WIC Program is to improve the nutritional status of infants, WIC mothers are encouraged to breastfeed their infants as the optimal infant feeding choice. Mothers receive Information, counseling, incentives, and on-going support (including breast pumps) while breastfeeding. Breastfeeding mothers are eligible to participate in WIC six months longer than non-breastfeeding mothers. Mothers who exclusively breastfeed their infants receive an enhanced food package.



Source: Hawai'i State Department of Health, Family Health Services Division, Women, Infants and Children (WIC) Services Branch. SWICH Data.

WIC has expanded its breastfeeding peer counselor training program to increase the number of trained WIC peer counselors that can provide effective breastfeeding information and support to their clients.

WIC also provides information on the **Hawai'i Mothers Breastfeeding Act** to all local service agencies. The Act protects women's ability to breastfeed and express milk at work during regular break times, encourages employers to establish policies to accommodate those activities, and protects the women's right to breastfeed in public places.

WIC initiated a pilot program in July 2007 that gives a **personal-use pump** to exclusively nursing mothers who meet specific criteria to extend the duration of breastfeeding, particularly exclusive breastfeeding.

Other Program Activities:

- The Maternal and Child Health Branch's **Perinatal Support Services** contracts with providers to ensure comprehensive breastfeeding education and support to roughly 1,500 high-risk pregnant women annually at 10 sites in the counties of Honolulu, Kauai and Maui.
- The Women's Health Section within the MCHB contracts the services of Healthy Mothers Healthy Babies Coalition of Hawai'i to administer an information, resource and referral line for pregnant women and their infants. Among the hundreds of phone calls received by the **MothersCare Phone Line**, many concern breastfeeding, especially requests for lactation support services.
- The **Division** published a manuscript in Breastfeeding Medicine in 2008 reporting that the manual breast pump may work as well as the electric breast pump in the WIC population when breastfeeding is encouraged and supported among women returning to work or school full-time.

Chlamydia

Goal: To Decrease the Rate of Chlamydia

Issue:

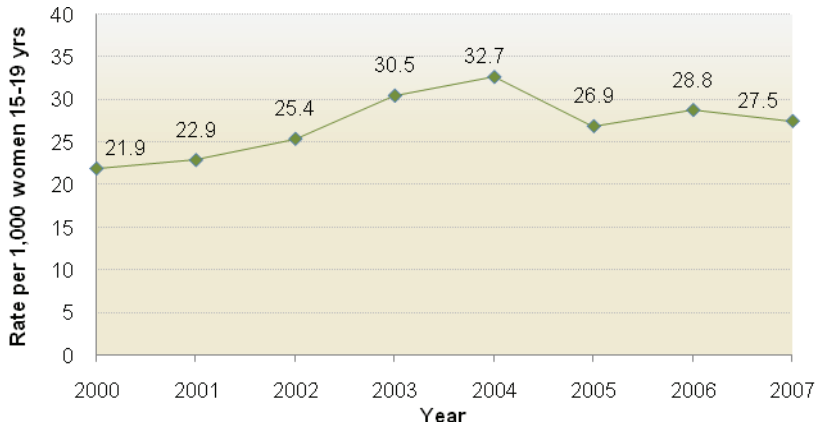
Chlamydia trachomatis infection is the most commonly-reported sexually transmitted disease (STD) in the US, with more than 2.8 million new cases estimated to occur each year. Even though symptoms of Chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman or man ever recognizes a problem. Chlamydia is transmitted during unprotected sexual activity. Additionally, pregnant women infected with Chlamydia can pass the infection to their infants during delivery, potentially resulting in severe complications.[14]

Healthy People 2010 Objective:

Reduce Chlamydia infections in women aged 15-24 years attending family planning clinics to 3%. Reduce Chlamydia infections in women aged 15-24 years attending STD clinics to 3%.

Population Based Data:

Figure 2.15 State of Hawai'i, Chlamydia Cases among Women Aged 15-19 Years: 2000-2007



Source: Hawai'i State Department of Health, Communicable Disease Division, STD/AIDS Prevention Services Branch.

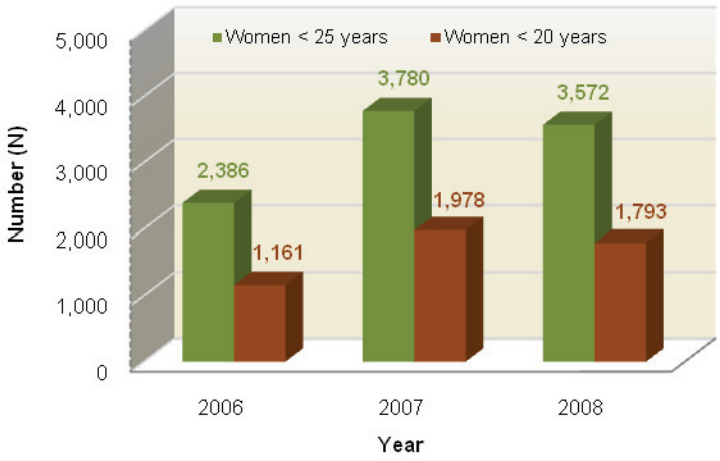
In 2006, the overall rate of Chlamydia in the U.S. was 3.5 per 1,000 population, compared to the rate of 4.4 per 1,000 in Hawai'i. The national rates were 5.2 per 1,000 women and 1.7 per 1,000 men in the population. The rates are much greater in both men and women between 15 and 24 years of age: 28.6 per 1,000 women aged 15-19 years; 5.5 per 1,000 men aged 15-19 years; 2.7 per 1,000 women aged 20-24 years; and 8.6 per 1,000 men aged 20-24 years.[15]

In Hawai'i, the rate of Chlamydia cases in women aged 15-19 years increased from 21.9 in 2000 to 32.7 in 2004, but has since declined to 27.5 in 2007.

Program Highlight:

Figure 2.16 State of Hawai'i, Chlamydia Testing among Clients in the Family Planning Program: 2006-2008

The Maternal and Child Health Branch **Family Planning Program** (FPP) ensures access to affordable reproductive health services to all individuals with a priority on low income and hard-to-reach individuals. Chlamydia screenings are recommended for all sexually active women 25 years of age and younger at the first visit, and annually thereafter, at the 39 statewide FPP service provider sites as part of a family planning visit. Testing is also recommended for all clients requesting pregnancy testing and emergency contraception. In FPP clients, the number of chlamydia tests have had a relative increase by 54% from 1,161 to 1,793 tests in 2008 for women younger than 20 years of age. Similarly, the number of tests in women under 25 years has increased by 50% from 2,386 to 3,572 tests in 2008.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Family Planning Program.

All clients who are sexually active receive counseling for STD prevention, including safer sex practices to reduce STD/HIV/AIDS and risk reduction counseling. Clinics may presumptively treat clients with symptoms of chlamydia. When the provider is notified of a positive test, the client is notified and treatment provided at no cost. Clients are encouraged to notify their partners to get treatment to avoid re-infection. Clients are scheduled for a re-screening appointment 3-4 months after treatment to ensure the client is not re-infected.

There are 13 FPP health education and outreach service contracts throughout the state who target *hard-to-reach* populations including adolescents, immigrants, low-income, under/uninsured, limited-English-proficiency (LEP), and homeless. The educators coordinate with clinical providers to reach those in need of services and routinely work with schools, community organizations, faith communities, and youth centers to promote family planning and related preventive health services. In FY 2008, 43,149 adolescents were provided health education regarding abstinence, relationships, puberty, anatomy and physiology, and contraceptive information, with a primary focus on educating adolescents on sexual health issues.

Other Program Activities:

- Division staff convened an **Adolescent Chlamydia Work Group** with representatives from Department of Health Communicable Disease Prevention, HMSA, youth service providers, university faculty and Association of Obstetricians and Gynecologists. The 2 major goals are 1) increase screening and treatment and 2) increase condom use among teens. The workgroup activities have included:
    - Collaborating with HMSA to develop an informational toolkit and educational initiative for primary care doctors to build awareness and encourage greater compliance with national screening and treatment guidelines
    - Researching successful strategies designed to promote condom use by teens using social marketing techniques
    - Supported increased state funding for screening and professional training
    - Clarifying insurance coverage for chlamydia screening among health plans in Hawai'i
    - Promoting expedited treatment approaches

Preventive Screening

Goal: To Increase the Percent of Women Who Receive Preventive Screenings

Issue:

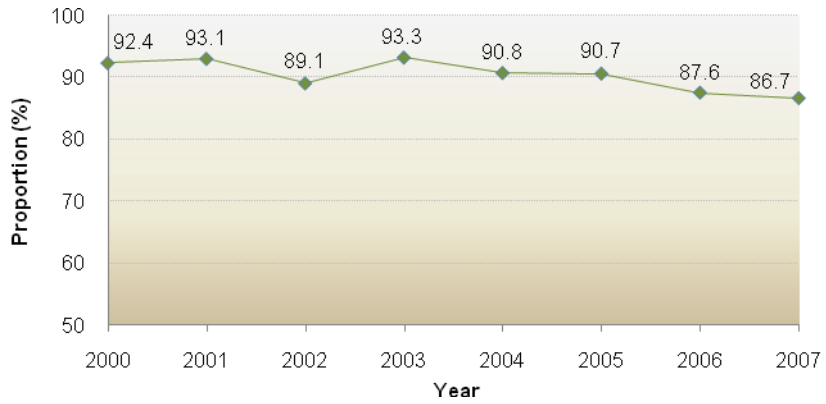
Regular physical exams and health screening tests are an important part of preventive health care. They can help ensure that common, serious diseases and conditions are detected and treated early. Cervical cancer is a common disease in women that is highly treatable when identified early. The PAP smear test is one of the most common screenings done among women.[2]

Healthy People 2010 Objective:

Increase the proportion of women 18 years and older who received a PAP test in the past 3 years to 90%.

Population Based Data:

Figure 2.17 State of Hawai'i, PAP Smear Screening within Past 3 Years, Resident Population: 2000-2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring, Behavioral Risk Factor Surveillance System (BRFSS).

In 2006, an estimated 84% of adult women over the age of 18 in the U.S. received PAP smear screening within the past three years with the rate in Hawai'i being 87.6%.[16]

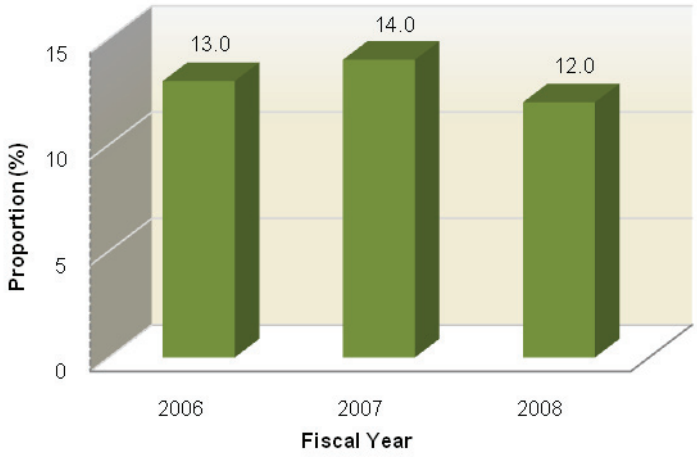
Since 2003, Hawai'i has seen a decrease in the number of women who have gotten a PAP smear screening within the previous 3 years, down from 93.3% to 86.7%. This is still higher than the national average in 2006, but does not meet the HP 2010 objective.

Program Highlight:

Figure 2.18 PAP Smear Screening among Clients in Family Planning Program Clinics: 2006-2008

The Maternal and Child Health Branch's **Family Planning Program** (FPP) provides access to affordable reproductive health services to all individuals, particularly low-income and hard-to-reach individuals. Cervical cancer screenings (PAP smears) are administered at its 39 statewide service provider sites as part of a family planning visit.

In 2008, FFP clinics were able to substantially increase the number of clients served due to an increase in program funding. The number of clients tested had a relative increase of 37% from 6,734 clients in 2006 to 9,239 in 2008. Along with screening numbers, abnormal PAP smear test results also increased from 881 in 2006 to 1,094 in 2008, but were found to occur in similar proportions among all three years. Clients with abnormal PAP smears are referred for follow-up services to confirm results and possible treatment.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Family Planning Program.

Other Program Activities:

- The Maternal and Child Health Branch's (MCHB) **Women's Health Section** promotes **National Women's Health Week** in May by convening a committee of private and public partners and overseeing activities. A Preventive Health Screening Guide is published annually to promote the importance of women's health care, preventive screening and check-ups. In 2008, 70,500 guides were distributed throughout the State at stores, health care agencies, churches, and at public events to encourage women to schedule a check-up with their medical providers. Other activities included radio announcements, bus placard announcements, government proclamations, and notices on state and county payroll messages.
- The MCHB Perinatal Health staff oversees statewide **Perinatal Support Service** contracts. Approximately, 1,500 high-risk pregnant women are screened annually for behaviors, and/or conditions that may place the woman and her fetus at greater risk for poor birth outcomes, including: substance use, depression, domestic violence or intimate partner violence, chronic disease, poor nutrition, oral health, and living conditions. Program participants are screened in each pregnancy trimester, post-partum and interconception period.
- **WIC** provided health screening for 18,814 women in federal fiscal year 2008 concerning diet and health (weight, anemia). Health information, support and referrals are made to encourage mothers to adopt healthier behaviors. Other health screenings conducted include domestic violence, use of recreational drugs, and smoking.

Violence Against Women

Goal: To Reduce the Rate of Violence Against Women

Issue:

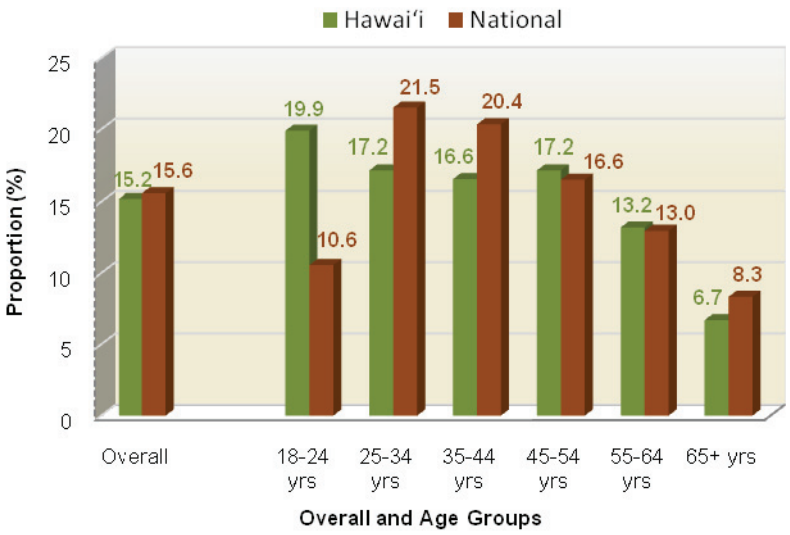
Intimate partner violence (IPV) is a significant public health problem that involves people in a close relationship. The term "intimate partner" includes current and former spouses and dating partners. IPV exists along a continuum from a single episode of violence to ongoing battering. IPV includes four types of violence: physical violence, sexual violence, threats of physical or sexual violence, and emotional abuse. All forms of IPV are preventable. A key to prevention is focusing on the first time someone hurts a partner (called first-time perpetration). Knowledge about the factors that prevent IPV is lacking. CDC and others are working to better understand the developmental pathways and social circumstances that lead to this type of violence.[17,18]

Healthy People 2010 Objective:

Reduce the rate of physical assault by current or former intimate partners to 3.3 physical assaults per 1,000 persons aged 12 years and older. Reduce the annual rate of rape or attempted rape to 0.7 rapes or attempted rapes per 1,000 persons. Reduce sexual assault other than rape to 0.4 sexual assaults other than rape per 1,000 persons aged 12 years and older.

Population Based Data:

Figure 2.19 State of Hawai'i, Women Who Reported Ever Been Hit, Slapped, Kicked or Hurt in Any Way by an Intimate Partner: 2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring, Behavioral Risk Factor Surveillance System (BRFSS).

Nationally, intimate partner violence (IPV) results in an estimated 1,200 deaths and 2 million injuries among women each year. IPV has also been associated with adverse health conditions and health risk behaviors.[18]

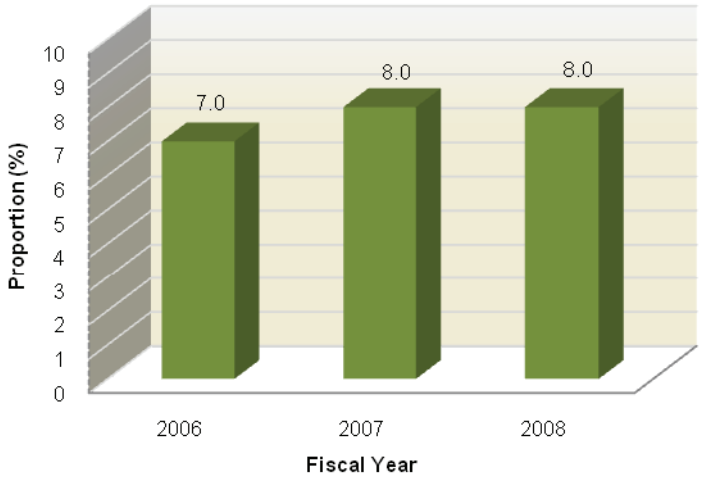
Four states asked about lifetime prevalence for IPV among women in 2007 in the Behavioral Risk Factor Surveillance System Survey.[16] An overall estimate of 15.6% in the 3 other states, and an estimate of 15.2% in Hawai'i reporting ever having been physically abused by an intimate partner. Analysis by age group revealed that the prevalence of self-reported IPV in women in Hawai'i was similar among all age groups compared to the 3 other states.

Program Highlight:

Figure 2.20 State of Hawai'i, Domestic Violence Screening among Clients in Perinatal Support Services Program: 2006-2008

The Maternal and Child Health Branch's Perinatal Support Services (PSS) contractors provide comprehensive preventive health screenings for behaviors, and/or conditions that may place the woman and her fetus at greater risk for poor birth outcomes including domestic violence (DV) or intimate partner violence (IPV). High-risk pregnant women are screened annually at 10 sites in the counties of Honolulu, Kauai and Maui. Women screened positive for DV or IPV receive ongoing counseling and support, and are often referred to behavioral health specialists and/or community resources to stop the cycle of violence.

In FY 2008, 1,777 women were screened for DV with 139 (or 8%) having a positive screen. The proportion screening positive is similar to previous estimates. Caution has to be used due in interpreting number of clients screened (1,200 in FY 2006 and 513 in FY 2007) due to some transitional issues related to changing the method of data collection and changes in the PSS program.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Women's Health Section, Perinatal Health.
Note: Data reflects Fiscal year (July 1-June 30) and there was a significant change in the method of data collection during FY2006 and FY 2007. Use caution when comparing FY 2008 to previous data.

Other Program Activities:

- Domestic violence screening and referrals are required for Division contracted services for women including **Primary Care for the uninsured, Family Planning** and for support services for families with young children including the **Healthy Start program** which targets families identified as at risk for child abuse.
- The **Violence Prevention Program (VPP)** within the MCHB staffs the State **Domestic Violence Fatality Review (DVFR)**. The purpose of the DVFR is to review the circumstances surrounding the death to reduce the incidence of DV fatalities through a systematic, multidisciplinary retrospective review process. Activities include:
    - Developing a statewide **Sexual Violence Primary Prevention** five-year plan to prevent sexual violence in Hawai'i. The Committee is comprised of private and public agencies and individuals who work in the area of sex assault
    - Contracting with Hawai'i Coalition Against Domestic Violence (HCADV) to develop a **5 year Domestic Violence Strategic Plan** that was requested in the 2005 Legislation: S.B. 1419, S.D.1 Act 142
    - Collaborating with the University of Hawai'i system to develop sexual violence and domestic violence prevention infrastructure, including the development of policies and procedures to address incidents of sexual harassment, stalking, intimidation, and verbal abuse
    - Public Service Announcements (PSAs) will be broadcast in the summer 2009 featuring University of Hawai'i student athletes speaking out against violence against women
    - Co-funded the development of a play for high school boys and one for high school girls by the Honolulu Theater for Youth which present issues related to sexual violence and its prevention
    - Provided technical assistance and consultation to assist in the development of a video on sexual violence prevention featuring community speakers from the island of Molokai speaking out against sexual violence and supporting positive behavior norms. The video was funded by the Centers for Disease Control's Rape Prevention Program and has received national recognition as a model for indigenous organizations/communities

Photographs on this page are courtesy of Glory Guerpo

EARLY CHILDHOOD HEALTH

- Intentional Child Injury
- Child Maltreatment
- Immunizations
- School Readiness
- Newborn Metabolic Screening
- Newborn Hearing Screening
- Social Emotional Health
- Health & Safety Standards

Intentional Child Injury

Goal: To Prevent Intentional Injury in Children

Issue:

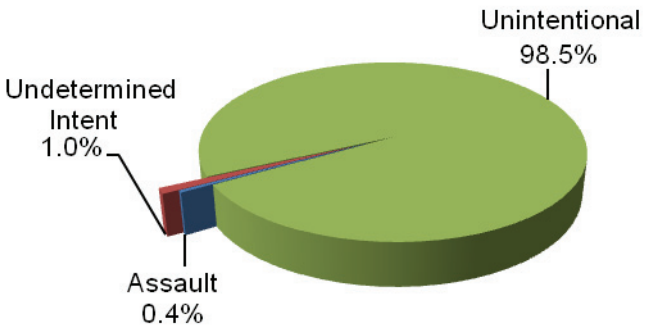
Shaken Baby Syndrome (SBS) is the leading cause of death from child abuse. SBS is a form of intentional injury to infants and children caused by violent shaking with or without associated contact with a hard surface. The mortality rate of victims of this intentional brain injury is about 25%, while survivors may suffer permanent brain damage and blindness.[19,20]

Healthy People 2010 Objective:

Reduce child maltreatment fatalities to 1.4 per 100,000 children under age 18 years.
Reduce the hospitalizations for nonfatal head injuries to 45 hospitalizations per 100,000 population.

Population Based Data:

Figure 3.1 State of Hawai'i, Intent of Nonfatal injuries among Children Less than 3 Years: 2003-2007 (N=26,355)

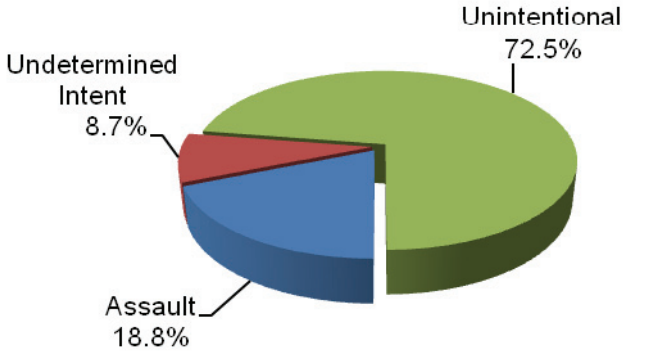


Source: Hawai'i State Department of Health, Injury Prevention and Control Program, Hawai'i Health Information Corporation data.

Nationally, an estimated 37,000 hospitalizations and 435,000 emergency department visits related to traumatic brain injury among 0-14 year olds occur annually which results in approximately 2,685 deaths each year.[20]

In Hawai'i, there were a total of 384 nonfatal injuries among residents less than 3 years of age that were classified as either an assault or of undetermined intent in 2003-2007 that were identified in hospital and emergency room records with the majority being classified as undetermined intent. Although this represented <1.5% of all non-fatal injuries in Hawai'i, these same two categories of intent account for 27.5% of the deaths in this age group.

Figure 3.2 State of Hawai'i, Intent of Fatal injuries among Children Less than 3 Years: 2003-2007 (N=69)

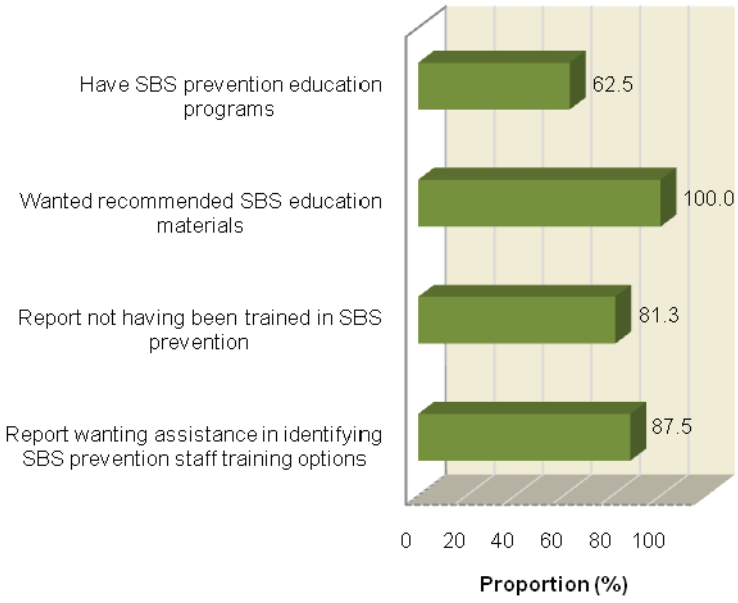


Source: Hawai'i State Department of Health, Injury Prevention and Control Program, Vital Statistics data.

Of the 69 fatal injuries identified on the death certificate in Hawai'i in 2003-2007 in children less than 3 years of age, 13 were classified as an assault and 6 were classified as undetermined intent.

Program Highlight:

Figure 3.3 State of Hawai'i Shaken Baby Syndrome (SBS) Prevention Summary of Hospital Surveys: 2008



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch.

The **Shaken Baby Syndrome (SBS) Task Force** was established in response to the passage of HRS 321-33 in 2008 that encourages hospitals to provide each parent of a newborn with written educational information about the dangerous effects of SBS and methods of prevention.

The SBS Task Force found that approximately two-thirds of the 13 respondent hospitals have protocols in place to provide parents with information on SBS prevention; all wanted recommended SBS materials; over 80% reported not having received prior training in SBS prevention; and 87.5% wanting assistance in identifying SBS prevention training for their staff. [21]

The hospitals surveyed for the report were informed of the new law and encouraged to develop a policy on SBS prevention education in mother-baby units. Recommendations include: a voluntary commitment statement that parents sign promising to refrain from abusing their children, creation of universal hospital coding and development of surveillance systems to monitor the diagnoses and classifications of traumatic brain injuries, other types of head injuries, and injuries to all areas of the body. Public and private collaborative partnerships and information for parents on a variety of health promotion issues was also highly recommended.

The SBS Task Force also assures that the "Never Shake a Keiki" flyer produced by Prevent Child Abuse Hawai'i is included in a statewide publication (Keiki O Hawai'i) given to all parents, approximately 19,000 each year.

Other Program Activities:

- The Maui **Children's Justice Center's SBS video** "Never, Ever, Never! Shaken Baby Syndrome: What Parents & Caregivers Need to Know" was put on YouTube for public viewing in 2008.

Child Maltreatment

Goal: To Prevent Maltreatment of Children

Issue:

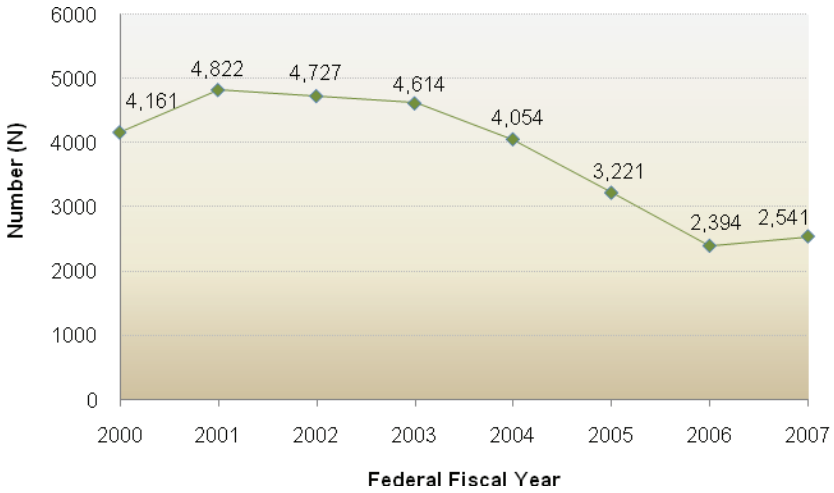
Child abuse and neglect affect children of every age, race, and family income level. Young mothers and fathers unprepared for the responsibilities of raising a child; overwhelmed single parents with little support; and families placed under stress by poverty, divorce, or a child's disability are all at greater risk. Child abuse can be physical, sexual, emotional, or verbal. Neglect specifically involves the failure to provide for a child's basic physical or emotional needs. Children, families, communities and society as a whole suffer from the devastating effects of abuse and neglect. Associated negative consequences can include physical pain, impaired cognitive development, poor overall health, anxiety, depression and social difficulties. Victims of abuse are more likely to experience problems in adolescence and adulthood, such as drug abuse, delinquency, teen pregnancy, mental health problems and abusive behavior.[22]

Healthy People 2010 Objective:

Reduce maltreatment of children to 10.3 per 1,000 children under age 18 years.

Population Based Data:

Figure 3.4 State of Hawai'i, Total Confirmed Cases of Abuse and Neglect: 2000-2007



Source: Hawai'i State Department of Human Services, Management Services Office. A Statistical Report on Child Abuse and Neglect in Hawai'i 2000-2007.
Note: Graph reflects unduplicated count. Data reflects federal fiscal year (October 1-September 30).

The national rate for referrals to Child Protective Services in 2006 was 47.8 referrals per 1,000 children. The rate of all children who received an investigation or assessment increased from 43.8 per 1,000 children for 2002 to 47.8 per 1,000 children for FFY 2006. Over a quarter (25.2%) of the investigations that reached the report stage determined that at least one child was a victim of child abuse or neglect. An estimated 905,000 children were victims of maltreatment compared to a rate of 12.1 per 1,000 children in the US.[23]

In Hawai'i, the number of confirmed cases of child abuse and neglect has seen a decline over the past eight years. However, it appears that the trends in confirmed abuse and neglect cases may be starting to increase with 2,541 cases reported in 2007.

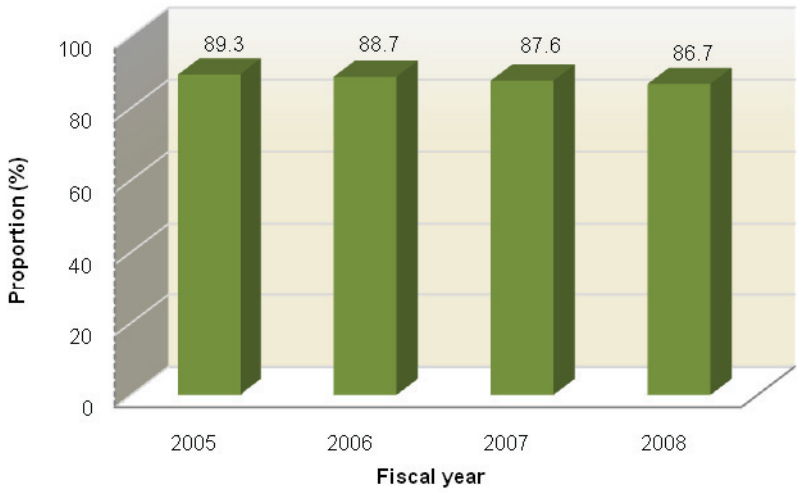
Each confirmed unduplicated case of child abuse and neglect is categorized among the six major types of Abuse and Neglect. Although, often there is overlap between types, the predominant factor is reported. Threatened harm accounted for 1,876 cases in FFY 2007, followed by 255 cases where neglect was the predominant factor, and 228 cases when physical abuse was the predominant factor.

Program Highlight:

Figure 3.5 State of Hawai'i, Proportion of Families of Newborns Screened for Risk of Child Abuse or Neglect by Healthy Start: 2005-2008

The Maternal and Child Health Branch's **Hawai'i Healthy Start Program** is a statewide, voluntary home visiting program that promotes family strengthening, child health and safety, and positive parent-child relationships.

In FY 2008, the Hawai'i Healthy Start Program screened 86.7% of all newborn families statewide, which is a slight decrease since 2005 when 89.3% were screened. In FY 08, 13,338 families were screened for risk factors with 2,454 families identified as high risk making them eligible for Healthy Start Services. Of those referred, 1,733 families, or 70%, were enrolled in and received Healthy Start home visiting services.



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Healthy Start Program. Data reflects Fiscal year (July 1-June 30).

Other Program Activities:

- **Parenting Support Programs** that support parents and strengthen families result in the reduction of family stress, family violence, and incidences of child abuse and neglect, all of which contributes to an environment where children will be "*Safe, Healthy, and Ready to Succeed,"* (Vision for children in Hawai'i, House Concurrent Resolution 38 passed by the State Legislature in 1998). **Parenting Support Programs** include a statewide system of community-based parenting education and family support services including:
  - The **Parent Line** provides informal counseling, information, and referral to callers who have questions or express concerns about their child's development and behavior, family issues, or questions about community resources. In FY '08, 5,101 calls were received from parents, caregivers, or community professionals. The **Parent Line Home Reach** program provides short-term home visitation services to resolve a parenting concern or family crisis
  - The **Parent Line Distribution Office** publishes and distributes statewide the **Keiki `O Hawai'i** which is an early childhood developmental newsletter distributed in the hospitals to first-time parents; the Teddy Bear Post parent education newsletter, distributed to families of preschool age children; and the A Happy Start brochure distributed to parents of children who are preparing to enter kindergarten
  - **Community-based Parent Support Groups** provides parenting and appropriate child development/guidance and support through trained, volunteer led peer parent groups
  - **Child Witnessing Violence** program is intended to help children cope with their emotional responses to violence and by helping the family create a safe, stable, and nurturing environment for the child by teaching parents to have age-expectations and an awareness of the effects of violence on children
- The Community-Based Child Abuse Prevention (CBCAP) support community-based efforts to develop, operate, expand, and enhance initiatives aimed at the prevention of child abuse and neglect. Through small purchase contracts, MCHB identifies statewide needs and provides support through technical assistance, trainings, and funding of statewide conferences and community awareness events that promote family strengthening in the prevention of child abuse and neglect.
- Hawai'i Children's Trust Fund is a legislative mandated (HRS §350B-2 passed by the State Legislature in 1993) public/private partnership with the Hawai'i Community Foundation for statewide grant-making activities to assure a network of primary prevention services and programs to support and strengthen families and to prevent child abuse and neglect.

Immunizations

Goal: To Avert All Cases of Vaccine-Preventable Morbidity and Mortality in Children

Issue:

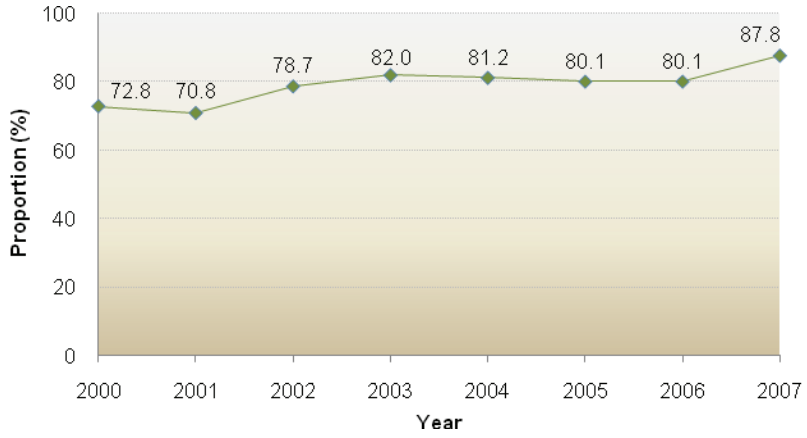
Rates of immunizations are often used to assess the health status of populations in the U.S. and worldwide. Immunizations have saved millions of lives over the years and prevented hundreds of millions of cases of disease in society. Consequently, efforts to promote vaccination coverage in both children and adults are important public health interventions. For example, before the measles vaccine was introduced in the early 1960's, about 500,000 cases of measles were reported annually in the U.S. with many more cases not reported. The number of cases declined significantly with only 37 cases of measles reported in 2004, but there has been a recent increase with 140 cases reported in 2008 with the highest rates among those who had not been previously vaccinated. Another example would be the introduction in 1985 of a vaccine for Haemophilus Influenza type b (Hib) that has been credited with an almost immediate decline by 99% in which Hib was identified as the causative agent for cases of meningitis (a serious infection of the covering of the brain and spinal cord) and other invasive illness attributed to Hib that can cause life-long morbidity and death.[24]

Healthy People 2010 Objective:

Increase the proportion of young children who receive all vaccines that have been recommended for universal administration for at least 5 years. Increase the proportion of children aged 19 through 35 months who received all recommended vaccines to 80 percent.

Population Based Data:

Figure 3.6 State of Hawai'i, Complete Immunization among Children 19-35 Months of Age: 2000-2007



Source: Centers for Disease Control and Prevention, National Immunization Program. National Immunization Survey. Hawai'i Data Tables.
Note: Complete Immunization reflects age appropriate receipt of Diptheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Haemophilus Influenza type b, and Hepatitis B immunizations.

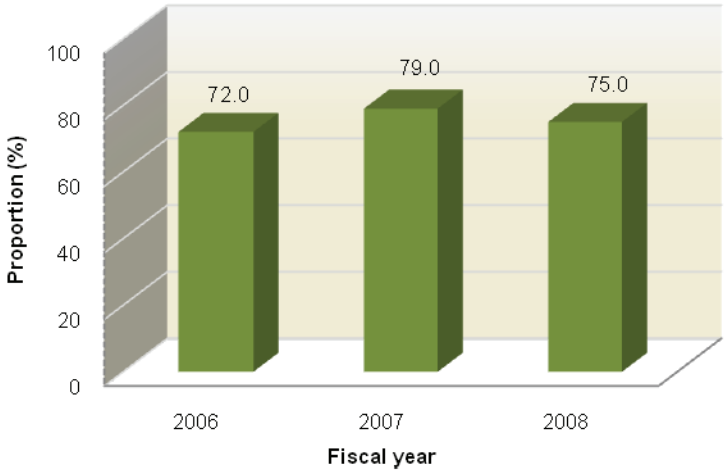
Over the past 7 years, Hawai'i has seen a steady increase of the immunization rate for children. In 2003, the state rate surpassed the national Healthy People 2010 objective of 80% and has remained above the national objective. In 2007, 80.1% of children 19-35 months of age had received routine vaccination in the United States compared to 87.8% in Hawai'I and meets the HP 2010 objective.[25]

Program Highlight:

Figure 3.7 Estimates of Receipt of Immunizations among Children under 18 Years of Age in Primary Care Health Centers: 2006-2008

FHSD contracts with health service providers, including the primary care health centers (PCHC) statewide, to provide health and dental services to the uninsured and underinsured. Services include providing immunizations for children ages 0 through 17 years. In 2007 and 2008, the immunization completion rates for the PCHCs were estimated at 79% and 75% respectively.

By supporting the network of primary health care providers, the state of Hawai'i assures all individuals have access to basic health services including those groups who have limited access to essential health care including Native Hawaiians, low-income working families, the homeless, immigrants, and migrants from the Freely Associated States of the Marshall Islands, Micronesia, and Palau.



Source: Hawai'i State Department of Health, Family Health Services Division, Primary Care Office. Data reflects Fiscal year (July 1-June 30).
Note: The data collected from the primary care service contractors are estimates derived from a sample of children served for each contractor. The rates are then averaged to get an aggregate for all contractors. The data does not individually identify what vaccines were provided.

Other Program Activities:

- WIC ensures children get immunized by checking the immunization status of children at 12, 18 and 24 months of age. Children are referred for vaccines as needed.
- FHSD contracts with Healthy Start, a home-visiting program for families at-risk for child abuse and neglect, and the Big Island Perinatal Health Disparities Project, a family strengthening program, to assess immunization rates on all 2 year olds and assist parents with having their children immunized on schedule.

School Readiness

Goal: Increase the Percent of Children Prepared to Enter Kindergarten

Issue:

The optimal health and development of children is critical to their ability to be ready for school. Assuring their healthy outcomes leads to better chances of school success. Children's readiness for school and beyond depends not only on the support they receive from their families, but upon the support they receive from the early childhood system, and the community in which they live. Children function best when they receive preventative and regular health care. Healthy children are more likely to be better prepared for academic and life success.[26]

Healthy People 2010 Objective:

No specific Healthy People 2010 objective.

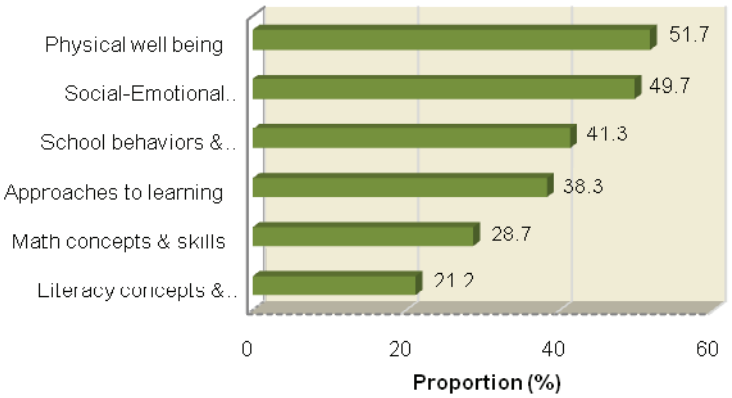
Population Based Data:

Figure 3.8 State of Hawai'i, Meeting Benchmarks in all Dimensions among Kindergarten Classes: 2004-2008

Source: Hawai'i State Department of Education, Systems Accountability Office, System Evaluation and Reporting Section. Note: Represent proporiton of classes demonstrating at least three fourths of all entering kindergarten children consistently display the skills and characteristics necessary for success in school life.

This data is from the Hawai'i State School Readiness Assessment (HSSRA) which was mandated in 2002 by the Hawai'i State Legislature (Act 72 passed in 2002) to measure the readiness of young children and elementary schools in Hawai'i. The instrument was designed for both school and system level use to assess whether children enter school ready to succeed and schools are ready for entering kindergarten children. From 2005 to 2006, there was a decrease in the proportion meeting all benchmarks for school readiness (11.4% to 8.3%), but has since been stable with 8.4% in 2008.

Figure 3.9 State of Hawai'i, Kindergarten Classes Consistently Displaying Key Skills and Characteristics: 2008

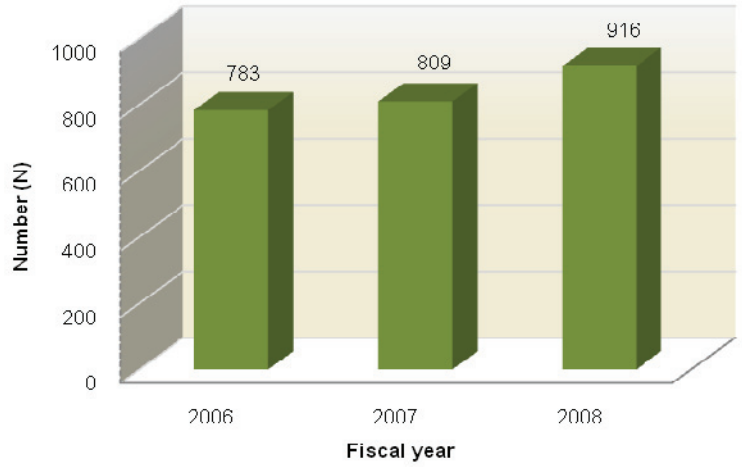


Source: Hawai'i State Department of Education, Systems Accountability Office, System Evaluation and Reporting Section. Note: Represent proporiton of classes demonstrating at least three fourths of all entering kindergarten children consistently display the skills and characteristics necessary for success in school life.

The data from the HRSAA is separated out into the six developmental domains important for successful learning experiences of entering kindergarten children. Physical well-being which includes muscle control, hygiene, and general physical health was most common with 51.7% of kindergarten classes consistently displaying these in 2008. Social-Emotional Behaviors which includes interpersonal and emotional behaviors and attitudes was also common with 49.7%. School Behaviors and Skills which include behaviors and skills relevant to the demands of classroom and school settings were found in 41.3%.

Program Highlight:

Figure 3.10 Children Served by the Preschool Developmental Screening Program: 2006-2008



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Preschool Developmental Screening Program. FY denotes Fiscal Year (July 1-June 30).

The **Preschool Developmental Screening Program** (PDSP) in Hawai'i is a statewide program in the Children with Special Health Needs Branch that promotes the early identification and intervention for developmental, learning, behavioral, and social-emotional problems for children age 3 to kindergarten entry. PDSP trains community resources, including early education/care providers, in standardized developmental/behavioral screening. PDSP provides consultation and facilitates follow-up for developmental/behavioral concerns. Follow-up may include evaluation, providing intervention strategies for families and early education/care providers, referral to the Department of Education for special education, referral to other community resources, and monitoring.

Children are identified for screening based on observation/screening from physicians, preschool teachers/directors, parents, and community agencies who work with young children. In FY 2008, the PDSP screened 916 children which is an increase from that screened in FY 2006 and FY 2007. Based on screening results 613 children were referred for additional services in FY 2008.

Other Program Activities:

- The **Family and Community Support Section** within MCHB contracts for Mobile Outreach (Play and Learn Groups) to provide activities and programs to isolated or homeless families that promote age-appropriate parent-child interaction, communication and positive discipline. These programs support nurturing and attached parent-child interactions that support parents as their children's first teacher.

- The Division **Early Childhood Comprehensive Systems** (ECCS) program is based on a federal grant from the Federal Maternal and Child Health Bureau built on scientific evidence regarding the relationship between early experience, brain development, and long-term developmental outcomes and initiatives to ensure that children enter school healthy and ready to learn. The purpose of ECCS is to support States and their communities in efforts to build and integrate early childhood service systems that address the critical components of access to comprehensive health services and medical homes; social-emotional development and mental health of young children; early care and education; parenting education and family support.

- The **Early Intervention Section** (EIS) within the Children with Special Health Needs Branch is responsible to ensure that any child from birth to three years of age at risk for a developmental delay receives a timely, multidisciplinary, comprehensive developmental evaluation and services as identified on the child's Individual Family Support Plan.

Newborn Metabolic Screening

Goal: To Increase Newborn Metabolic Screening

Issue:

Screening programs for newborns have been shown to be cost-effective and successful in preventing mortality and morbidity for metabolic disorders and hearing loss. Their success reflects the systems approach from early screening to appropriate early intervention and treatment. Metabolic refers to chemical changes that take place within living cells. These conditions cannot be seen in the newborn, but can cause physical problems, mental retardation and, in some cases, death. Fortunately, these disorders are fairly rare. When test results show that the baby has a birth defect, early diagnosis and treatment can make the difference between lifelong disabilities and healthy development. A blood specimen is taken (with a simple prick to the baby's heel) before the baby leaves the hospital, dried, and sent to the newborn screening laboratory for testing.[2,27]

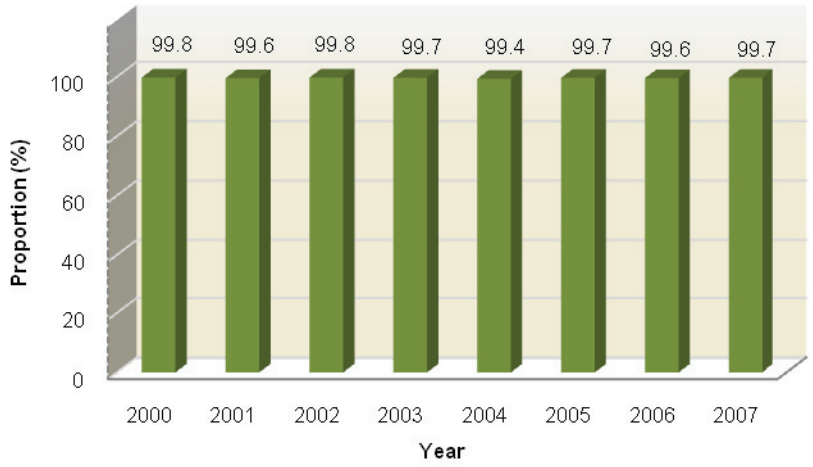
Healthy People 2010 Objective:

Ensure appropriate newborn bloodspot screening, follow-up testing, and referral to services.

Population Based Data:

Because both programs are universal screening programs, the program data is also descriptive of the state population.

Figure 3.11 State of Hawai'i, Metabolic Screening among Newborns: 2000-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Newborn Metabolic Screening Program. Data reflects calendar year (January 1-December 31).

Nearly all infants (99.7%) received a newborn metabolic screen in Hawai'i and 100% of those with a true positive screen (approximately 13 children in 2007) received timely follow up to definitive diagnosis and clinical management. Nationally, there is some variation in the number of and which specific conditions that individual states screen for in their metabolic screening programs. In 2007, almost all states also had close to a 100% rate of timely follow up of abnormal screens.[28]

Program Highlight:

The **Newborn Metabolic Screening Program** (NBMSP) was established within the Children with Special Health Needs Branch in 1986 with the passage of HRS §321-291. NBMSP has statewide responsibilities for ensuring that infants born in the State of Hawai'i are satisfactorily tested for 32 disorders since 2003. These disorders can cause mental and growth retardation, severe health problems, and even death, if not detected and treated early in the newborn period. NBMSP tracks and follows-up to ensure that the infants with specified diseases are detected and provided with appropriate and timely treatment.

Newborn Hearing Screening

Goal: To Increase Newborn Hearing Screening

Issue:

Good hearing is critical for babies to learn to talk. Babies begin to listen from birth. They learn to speak by listening to their families talk. Every year 1 to 3 in every 1,000 children nationally are born with hearing loss. Tests for hearing loss are simple and safe and use either a soft earphone placed in the baby's ear or tiny electrodes taped to the baby's head. Hearing loss in infants can negatively impact speech and language development; if hearing loss is identified early through newborn screening, the negative impact can be reduced or eliminated through early intervention.[29]

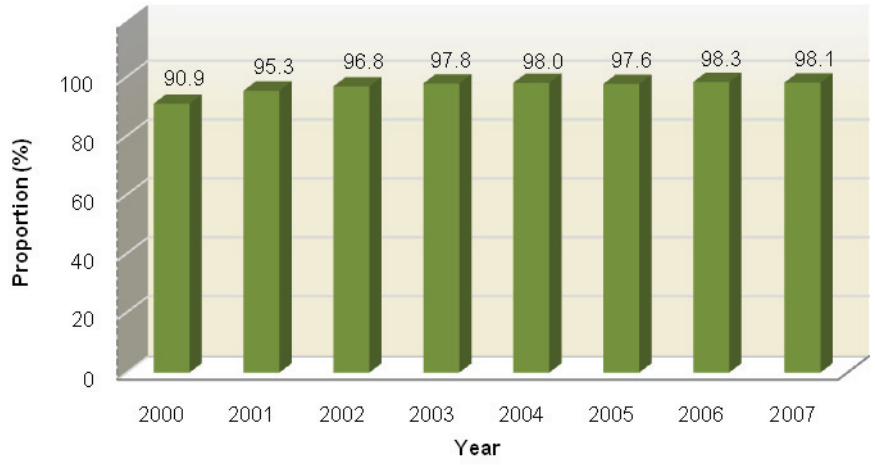
Healthy People 2010 Objective:

Increase the proportion of newborns that are screened for hearing loss by age 1 month, have audiologic evaluation by age 3 months, and are enrolled in appropriate intervention services by age 6 months.

Population Based Data:

Because both programs are universal screening programs, the program data is also descriptive of the state population.

Figure 3.12 State of Hawai'i, Hearing Loss Screening among Newborns before Hospital Discharge: 2000-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Care Needs Branch, Hawai'i Early Childhood Detection and Intervention (HECHDI) Project.

Hawai'i is above the national average of 92.3% for newborn hearing screening before discharge from the hospital.[30] In 2007, almost all infants (98.1%) were screened before being discharged from the hospital.

Of the 65 infants who were identified with hearing loss in Hawai'i in 2007, 75.4% received intervention services by age 6 months, compared to the national rate of 61.4% in 2006.[29]

Program Highlight:

The **Newborn Hearing Screening Program** (NHSP) oversees statewide efforts to screen all newborns for hearing loss, identify infants who are deaf or hard-of-hearing, and refer them for appropriate follow-up. Early hearing detection and intervention for children with hearing loss supports the development of language, cognitive, and social skills.

Goal: Young Children's Social and Emotional Health/Mental Health Development Will Be Promoted

Issue:

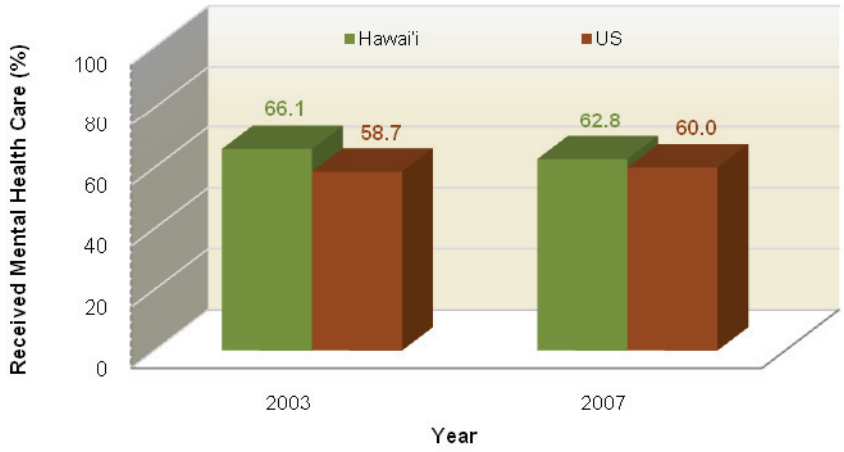
Promoting healthy social and emotional development in all young children leads to children who are better able to experience, regulate, and express emotions; form close, secure relationships; explore the environment and learn. Early identification of children at risk for the development of mental health concerns and challenging behaviors into appropriate child development and mental health delivery systems leads to the need for less intensive services.[31]

Healthy People 2010 Objective:

Increase the proportion of children with mental health problems who receive treatment.

Population Based Data:

Figure 3.13 Receipt of Mental Health Care Among Children 2-17 Years of Age with Problems Requiring Counseling: 2003, 2007

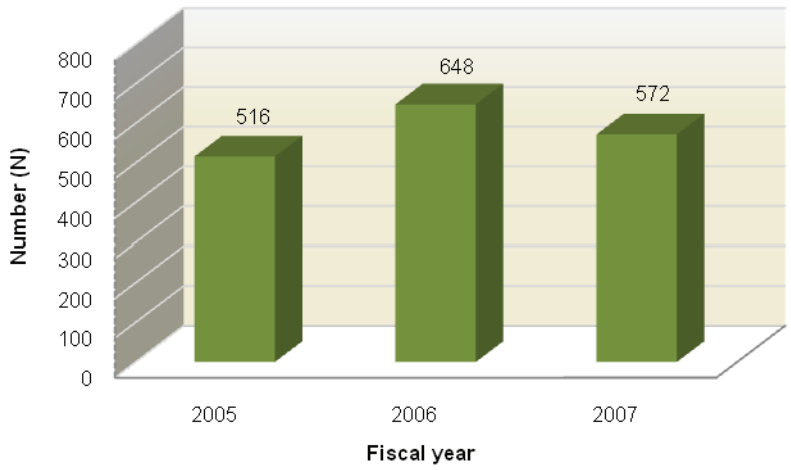


Between 2003 and 2007, there was little change in the proportion in receipt of mental health care for children 2-17 years of age with problems requiring counseling in Hawai'i. Further, there was no difference between Hawai'i and the U.S. estimates.[32]

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children's Health 2003 and 2007.

Program Highlight:

Figure 3.14 Providers Trained by Keiki Care Program: 2005-2007



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Keiki Care Program. Data reflects Fiscal year (July 1-June 30).

The **Keiki Care Project** is a statewide, collaborative project of the Children with Special Health Needs Branch's Early Intervention Section and the Department of Human Services. Keiki Care provides training, technical assistance, and support for children age 3 to 5 years with social, emotional, and behavioral challenges who are enrolled in preschools, family childcare homes, and other "community-based" early childhood programs. The project actively collaborates in statewide efforts to identify and enhance service options that include assisting families and early childhood professionals in accessing resource and support networks as well as adapting teaching strategies and learning environments to maximize the potential of children. The Keiki Care Project trained a total of 1,220 providers in 2006-2007.

In addition to training providers, the number of children receiving direct services through the Keiki Care Project has steadily increased from 51 in 2005 to 119 in 2007.

Other Program Activities:

- The FHSD's **Early Childhood Comprehensive Systems** (ECCS) and the **Hawai'i Mental Health Transformation State Incentive Grant** partnered to convene and Early Childhood Mental Health Leadership Summit. Sixty leaders from the early childhood and mental health communities attended representing various agencies such as: Departments of Education, Health, and Human Services; Head Start State Collaboration Office and Head Start Programs; community health centers, Learning Disabilities Association of Hawai'i, pediatricians, University of Hawai'i School of Social Work, Salvation Army, First Relationships, Good Beginnings Alliance, and the Hilopa'a Project. The outcome of the meeting was to gain consensus on working definitions of early childhood mental health, infant mental health, and natural supports for families in Hawai'i.
- In 2007, ECCS became one of eight state cohorts with the **Center on the Social and Emotional Foundations for Early Learning** (CSEFEL). CSEFEL provided training and technical assistance to Hawai'i in building the professional development of early childhood practitioners working with children's challenging behaviors and to develop the infrastructure for social emotional development of young children. In 2008-2009, 95 Early Childhood practitioners from over 30 programs have been trained in the CSEFEL Pyramid Model approach and the Parent Modules.

Goal: Health and Safety Standards in Early Childhood Care and Education Settings will be Ensured

Issue:

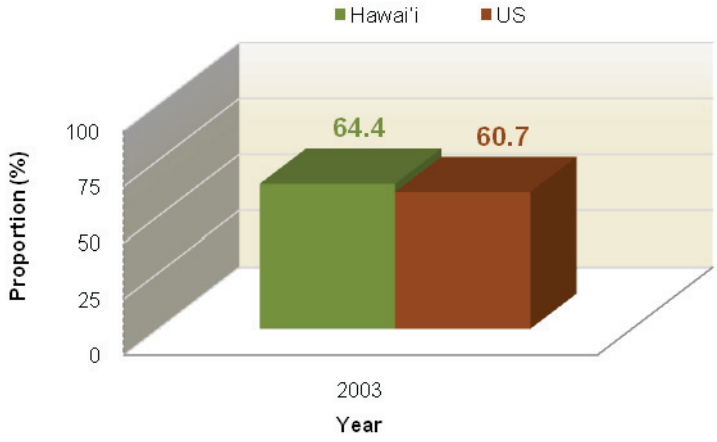
Ensuring health and safety standards in early childhood education and care settings contribute to children's optimal growth and development. Early childhood programs can play an integral role to improving healthy and safe outcomes for children outside traditional health care settings.[33]

Healthy People 2010 Objective:

Increase the quality, availability and effectiveness of educational and community-based programs designed to prevent disease and improve health and quality of life.

Population Based Data:

Figure 3.15 Regularly Attended Preschool, Kindergarten, Head Start, or Early Start among Children 3-5 Years of Age: 2003



In 2003, it was estimated that 64.4% of children aged 3-5 years in Hawai'i regularly attended preschool, kindergarten, Head Start, or Early Start during the past month. This was higher than the national rate of 60.7%.[32]

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children's Health 2003.
Note: This question was not repeated in the 2007 National Survey of Childen's Health so current data is not available for this measure.

Program Highlight:

Figure 3.16 Number and Type of Providers Trained by Healthy Child Care Hawai'i: 2002-2008

Year	Number and Type of Provider Trained
2002-2005	27 physicians
2006	55 nurses and 1 physician
2007	39 nurses
2008	26 physicians

Healthy Child Care Hawai'i (HCCH) is a collaborative effort of the Department of Health/Children with Special Health Needs Branch, University of Hawai'i School of Medicine/Department of Pediatrics, American Academy of Pediatrics-Hawai'i Chapter, and the Department of Human Services. HCCH is based on the principle that families, child care providers, and health care providers, in partnership, can promote the healthy development of young children in child care and increase access to preventive health services and safe physical environments for children. HCCH trains health consultants working in early childhood settings to ensure that children are healthy and safe. From 2002-2008, 148 health care professionals were trained by the Healthy Child Care Hawai'i (HCCH) Project throughout the state.

Child care health consultation focuses on health issues that apply to the children, families, and staff as a group rather than on individual children. A child care health consultant is defined as "a health professional who has an interest in and experience with children, has knowledge of resources and regulations and is comfortable linking health resources with facilities that provide primarily education and social services" (Caring for Our Children, 2nd edition). Health consultants assist programs in providing practical, relevant support and encouragement to the child care staff for the improvement of quality. Examples of group issues include infection control measures to prevent the spread of disease, nutritious snacks and meals, and playground safety to prevent injuries.

HCCH developed "Hot Topics – Health & Safety for Early Childhood Programs" cards on health, safety, outdoor play, classrooms, interactions, and infant-toddler topics. Interactive trainings at child care sites are provided for child care providers and health consultants. From March 2008 to April 2009, there were 12 Hot Topics sessions for 106 child care providers and health consultants.

Other Program Activities:

- FHSD's **Early Childhood Comprehensive System** (ECCS) State Plan 2005-2008 includes the goal that "Health and safety standards in early education and care settings will be ensured." ECCS partners are working to provide information about health and safety standards, health resources, and health/safety materials for families and child care providers. Over two hundred practitioners from child care practitioners attended the March 2009 Early Childhood Health Conference.

CHILD AND ADOLESCENT HEALTH

- Child Overweight/Obesity
- Child Oral Health
- Underage Drinking
- Teen Pregnancy/Births
- Unintentional Child Injuries

Child Overweight/Obesity

Goal: To Prevent Child Overweight/Obesity

Issue:

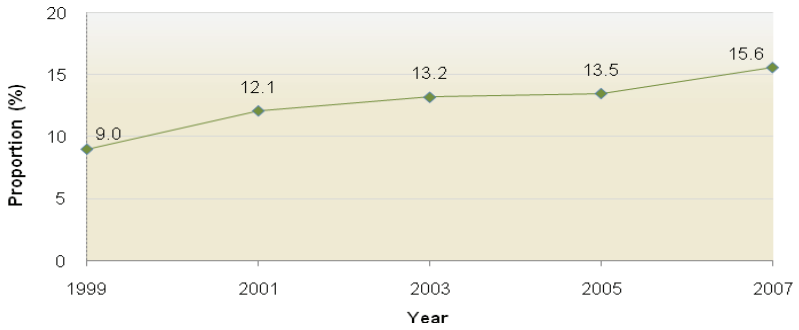
The increasing number of children who are overweight is a serious health problem in the United States, and the prevalence of preschool children who are overweight has doubled since the 1970s. The onset of weight gain in childhood accounts for 25 percent of adult obesity; but weight gain that begins before age 8 and persists into adulthood is associated with an even greater degree of adult obesity. Childhood weight gain is associated with a variety of adverse consequences, including an increased risk of cardiovascular disease, type 2 diabetes mellitus, asthma, social stigmatization, and low self-esteem.[2,34]

Healthy People 2010 Objective:

Reduce the proportion of children & adolescents who are overweight or obese to 5% (based on being at or above the 95% for age and gender specific U.S. growth charts).

Population Based Data:

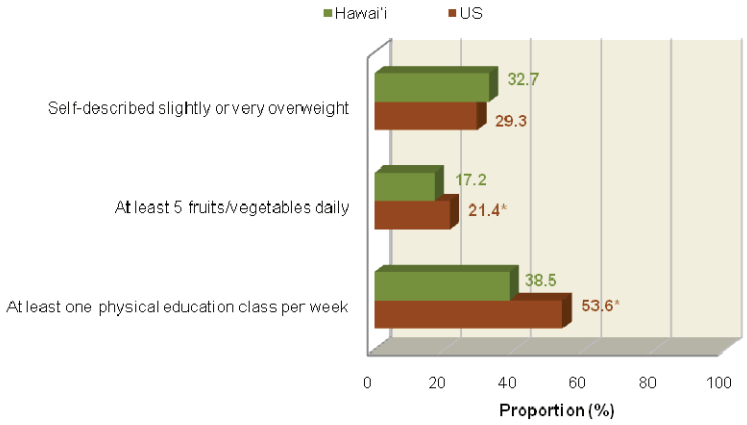
Figure 4.1 State of Hawai'i, Proportion Obese among Adolescents in Grades 9-12 Attending Public Schools: 1999-2007



Source: University of Hawai'i, Curriculum Research and Development Group (CDRG). Hawai'i Youth Risk Behavior Survey (YRBS). YRBS is administered in odd-numbered years in public, middle and high schools.

The 2003-2004 National Health and Nutrition Examination Survey, using measured heights and weights, indicate that nationally an estimated 17% of children and adolescents, 2-19 years of age are obese.[34]
In 2007 based on self-reported measures of height and weight, 13.0% of high school students nationally were obese compared to 15.6% in Hawai'i. From 1999 to 2007, there was a relative increase of 73% in obesity for public high schools in Hawai'i.[35]

Figure 4.2 Obesity, Physical Activity, and Nutrition among Hawai'i Public High School Students vs. U.S. High School Students: 2007

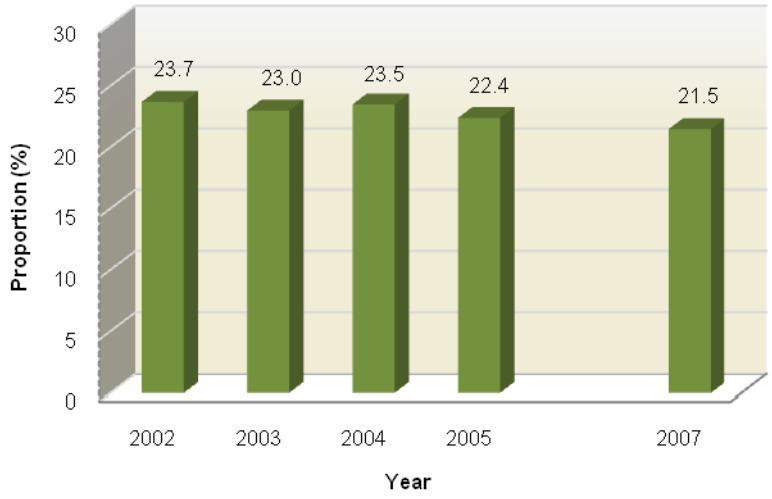


Source: University of Hawai'i, Curriculum Research and Development Group (CDRG). Hawai'i Youth Risk Behavior Survey (YRBS).
Note: YRBS is administered in odd-numbered years in Hawai'i's public middle and high schools. Note: * Denotes a significant statistical difference at p=0.05.

In 2007, the Youth Risk Behavior Survey (YRBS), based on self-reported data among high school students, estimated similar estimates of obesity (≥95% for BMI by age and sex) and describing themselves as being at least slightly overweight nationally and in Hawai'i public high school students. Hawai'i public high school students were less likely to eat 5 or more fruits and vegetables daily and were less likely to attend physical education classes compared to high school students nationally.[35]

Program Highlight:

Figure 4.3 At Risk for Overweight and Obese among Children 2-5 years of Age Receiving WIC Services: 2002-2005, 2007



Source: Hawai'i State Department of Health, Family Health Services Division, Women, Infants and Children (WIC) Services Branch, PedNSS. No data was available for 2006.

The Women, Infants and Children (WIC) Supplemental Nutrition Program is a federally funded program which provides nutritious supplemental foods, nutrition counseling, breastfeeding counseling, and referrals to low-income residents. Services are limited to women who are pregnant, breastfeeding or postpartum, and to infants or children under 5 years of age.

WIC staff monitor length and weight on infants and children up to age 2 and height/weight ratios (Body Mass Index) on all 2 to 5-year-olds to assess whether they are in a healthy range. WIC dieticians and certified staff counsel on the risk of childhood weight gain and explore ways to make recommended changes in diet and activity with caregivers. In 2007, 21.5% of WIC children 2-5 years of age in Hawai'i were at-risk of being overweight or obese. Although this represents a small decrease from 2005, the estimate in Hawai'i remains significantly lower than the average of 31.2% in all those in PedNSS.[7] The significance of this recent decline in Hawai'i in the light of increased rates shown in other data sources is uncertain and will be monitored.

In October 2009, WIC food packages will include healthier whole grains, fresh fruits and vegetables and lower fat dairy products.

Other Program Activities:

- The Division ensures individuals (including children) who do not have health insurance have access to primary health care services by contracting with service providers throughout the state. Contractors are required to measure height/weight ratios of children and adolescents to identify children who are overweight or at-risk for becoming overweight and are referred for treatment/support services.
- The Child and Youth Wellness Section within MCHB provided training in partnership with American Academy of Pediatrics, Hawai'i Chapter to educate health professionals on weight management interventions using the Hawai'i Pediatric Weight Management Toolkit. The Toolkit is designed to help health care providers to evaluate and treat overweight children and adolescents. The Division's Maternal & Child Health Branch also supported the reprinting of the Toolkit for distribution to physicians, health professionals and community stakeholders.

Child Oral Health

Goal: To Improve Child Oral Health

Issue:

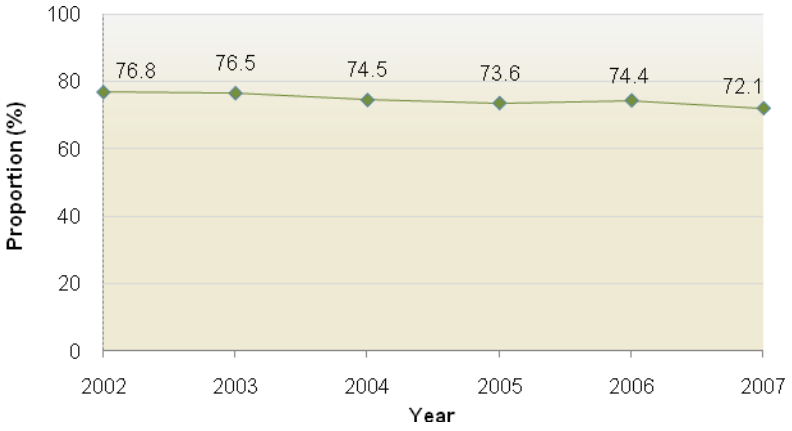
Dental caries are the most common chronic health problem in children 5 to 17 years. If untreated, dental decay can cause unnecessary pain and infection that can compromise a child's ability to eat well. This can result in absence from and inability to concentrate in school, early tooth loss that impairs speech development, failure to thrive and reduced self-esteem. Children are an excellent target for extensive preventive strategies since early dental disease is reversible and treatment can prevent progression to advanced, more painful and destructive disease.[36]

Healthy People 2010 Objective:

Reduce the proportion of children aged 6 to 8 years who have dental caries in either their primary or permanent teeth to 42%.

Population Based Data:

Figure 4.4 State of Hawai'i, Dental Caries in Primary and Permanent Teeth among Children 6-8 Years of Age: 2002-2007



Source: Hawai'i State Department of Health, Dental Health Division, Dental Hygiene Branch.

Results from the 2003-2004 National Health and Nutrition Examination Survey (NHANES), using oral health assessments, indicate that 53 percent of children aged 6 to 8 years had dental caries.[36]

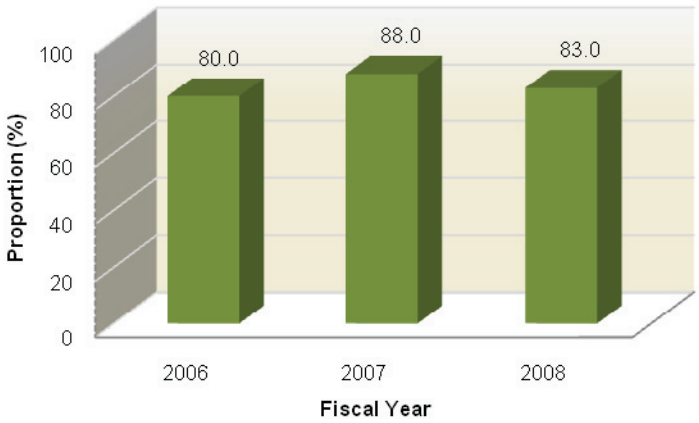
Estimates of children in Hawai'i with dental caries has declined since 2002, but 72.1% had caries in 2007 exceeding the Healthy People 2010 objective of 42% as well as that found nationally in 2003-2004 when the rate in Hawai'i ranged from 74.5% to 76.5%.

Program Highlight:

Figure 4.5 State of Hawai'i, Estimates of Clients Receiving Oral Health Assessments in Primary Care Health Centers: 2006-2008

FHSD contracts with 15 health service programs, including Primary Care Health Centers, to provide health and dental services to the uninsured. An oral health assessment is encouraged as part of all well-child visits for children age 0-18. In FY 2007 and FY 2008, the primary care service contractors were able to provide dental assessments for 88% and 83% of children respectively.

Because the primary care contractors have limited resources to handle the demand for dental services, children and adults with Medicaid or QUEST health insurance coverage are referred to the Community Case Management Corporation (CCMC) for assistance with finding a regular dentist. CCMC is contracted by the State Medicaid program to provide this service.



Source: Hawai'i State Department of Health, Family Health Services Division, Primary Care Office. Data reflects Fiscal year (July 1-June 30).
Note: The data collected from the primary care service contractors are estimates derived from a sample of children served for each contractor. The rates are then averaged to get an aggregate for all contractors.

By supporting a network of primary care health providers, the State of Hawai'i ensures all individuals have access to basic health and dental services including those groups who have limited access to essential health care including Native Hawaiian, low-income working families, the homeless, immigrants, and migrants from the Freely Associated States of the Marshall Islands, Micronesia, and Palau.

Other Program Activities:

- FHSD staff are participating in a national initiative with the federal **Head Start** program and American Academy of Pediatric Dentistry to improve oral health care for low-income children in the Head Start program. Hawai'i was 1 of 12 states selected to participate in this national initiative. The Head Start program provides comprehensive developmental services for low-income preschool children age 3-5 years and support services for their families. In Hawai'i, Head Starts serves over 2,600 children annually. Plans will be developed to ensure these children are linked to routine dental care.
- The Neighbor Island **FHSD** staff participates in the Tri-County Oral Health Task Force which is comprised of the 3 neighbor island county oral health groups: The Kauai Dental Health Task Force, The Hawai'i Island Dental Task Force, and the Maui Oral Health Task Force. Neighbor island division staffs are active participants in these coalitions. The coalitions work to address the specific needs of their communities while ensuring that the content areas and objectives mirror the State Oral Health Task Force plan.
- **FHSD** collaborates with the Department of Health Dental Health Division (DHD) to fund dental surveillance of children's oral health throughout the state. DHD hygienists visit 3rd graders in select elementary public schools and conduct comprehensive assessment of children's oral health, provide education and notify parents if children require further dental services. Data on rates of dental cavities and treatment needs are collected from these assessments.
- The **Children with Special Health Needs Program** in the Children with Special Health Needs Branch provides case management and funding of dental care for children with craniofacial conditions, as needed.
- The **WIC** supplemental nutrition program for mothers and their young children, provides oral health education to children and pregnant women and makes referrals for dental care at Community Health Centers.

Underage Drinking

Goal: Prevent Underage Drinking Among Adolescents

Issue:

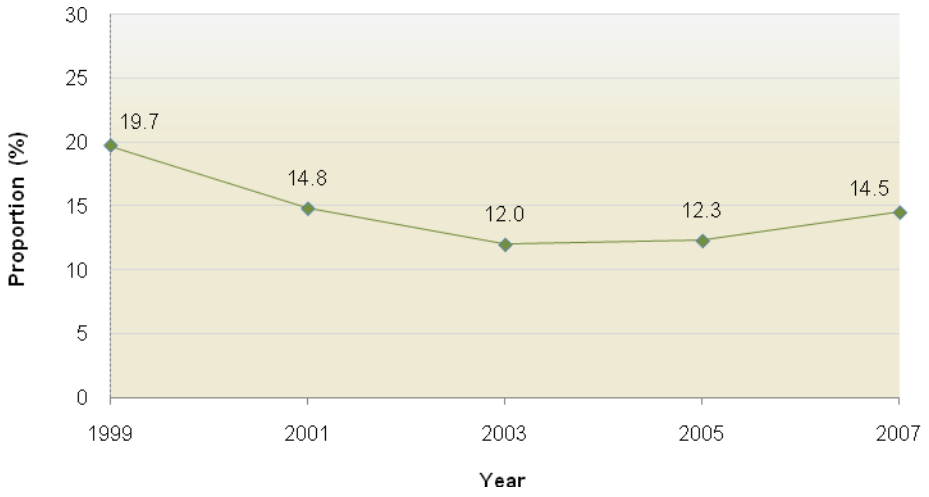
Despite the many health risks associated with underage drinking, underage drinking is still considered socially acceptable in many sectors of the community. New research on brain development and the effects of alcohol on the teen brain, poses lifelong consequences for teenagers than the usual health and addiction risks including loss of memory, cognitive ability, decision-making and impulse control. Alcohol is linked to other risk behaviors (motor vehicle accidents, high risk sexual activity, violence, injury, suicide and other drug use) and is a major contributor to the top causes of adolescent fatalities.[2,37]

Healthy People 2010 Objective:

Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days to 89%.

Population Based Data:

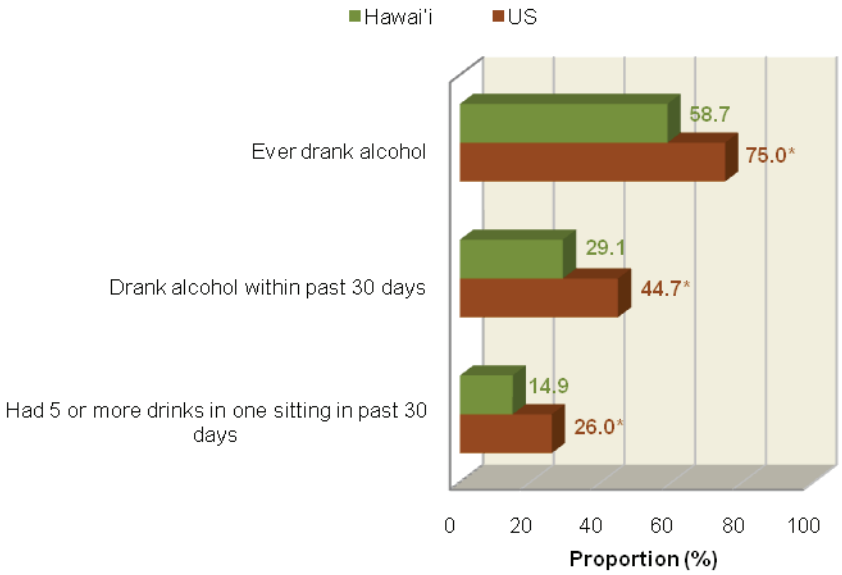
Figure 4.6 State of Hawai'i, Alcohol Drinking within Past 30 Days among Public School Students in Grades 6-8: 1999-2007



Source: University of Hawai'i, Curriculum Research and Development Group (CDRG). Hawai'i Youth Risk Behavior Survey (YRBS).
Note: YRBS is administered in odd-numbered years in public middle and high schools.

Teens who start drinking before age 15 are 4 times more likely to develop alcohol dependence and 2.5 times more likely to develop an addiction than those who begin drinking after age 21.[37] The 2007 public middle school youth survey in Hawai'i reported that 14.5% had at least one alcoholic drink in the past 30 days and which is an increase from 12.0% and 12.3% in 2003 and 2005, respectively.[35] This proportion in Hawai'i fails to meet the HP 2010 objective.

Figure 4.7 Alcohol Use among Hawai'i Public High School Students vs. U.S. High School Students: 2007



In 2007, Hawai'i public high school students were less likely to report ever drinking alcohol, drinking within the past 30 days, and binge drinking compared to students nationally.[35]

Source: University of Hawai'i, Curriculum Research and Development Group (CDRG). Hawai'i Youth Risk Behavior Survey (YRBS).
Note: YRBS is administered in odd-numbered years in Hawai'i's public middle and high schools.
Note: * Denotes a significant statistical difference at p=0.05.

Program Highlight:

The **Children and Youth Wellness** staff in MCHB participate in the **Hawai'i Partnership to Prevent Underage Drinking (HPPUD)** by ensuring the health-related aspects of underage drinking are a part of the public health message to the community at large. The statewide coalition is comprised of more than twenty public and private entities. Each county also maintains HPPUD coalitions. Neighbor Island Division staff participates on the county coalitions.

Other Program Activities:

- The Maternal and Child Health Branch **Adolescent Wellness Program** staff facilitates a work group that administers the middle and high school Youth Risk Behavioral Survey. The work group includes members from Department of Health, Department of Education and University of Hawai'i Education faculty.
- The Division **Fetal Alcohol Spectrum Disorder** (FASD) program provides information and education about the potential negative affects on the developing fetus when pregnant women consume alcohol. The FASD coordinator collaborates with HPPUD on alcohol use prevention efforts when possible.

Teen Pregnancy/Births

Goal: To Reduce the Rate of Teen Births

Issue:

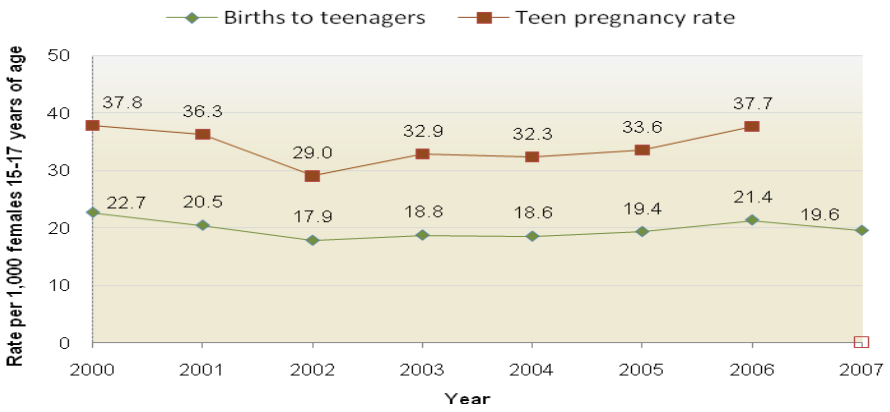
The costs of teen childbearing have negative effects on the life prospects of teen mothers and their families as well as the public's investment in healthcare, child welfare and the criminal justice system. Teen mothers are more likely to drop out of school, remain unmarried, and live in poverty. Their children are more likely to be born at low birth weight, grow up poor, live in single-parent households, experience abuse and neglect, enter the child welfare system, become teen parents, and be incarcerated.[2,38]

Healthy People 2010 Objective:

Reduce pregnancies among adolescent females to 43 per 1,000 females aged 15 to 17.

Population Based Data:

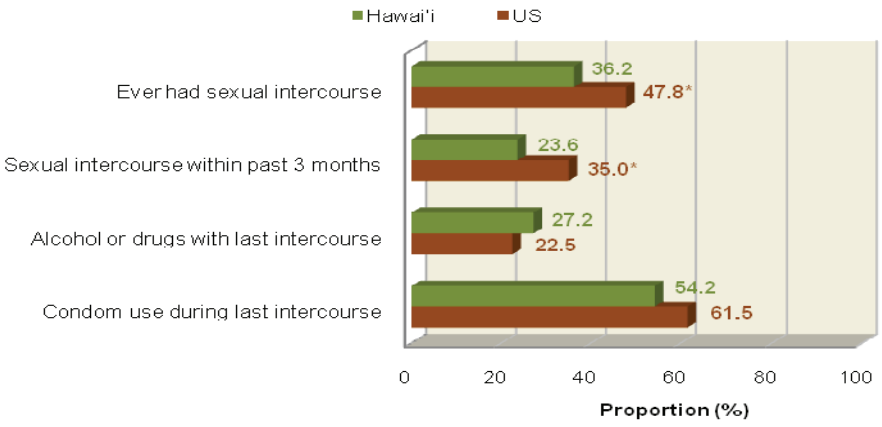
Figure 4.8 State of Hawai'i, Pregnancy and Birth Rates among Females 15-17 Years of Age: 2000-2007



Source: Hawai'i State Department of Health, Office of Health Status Monitoring.
Note: The rate of unintended pregnancy is derived from estimates from the OHSM birth, fetal death, and Induced Termination of Pregnancy files which were not available for 2007 at time of publication.

The teen pregnancy rate in Hawai'i has steadily increased since 2002 with a rate of 37.7 per 1,000 females 15-17 years of age in 2006. Nationally, in 2003, the rate was 42.3 per 1,000 females 15-17 years of age.[39]
In Hawai'i, the rates have increased with 21.4 births per 1,000 females 15 to 17 years of age in 2006 and 19.6 in 2007 which remains lower than the national rate of 22 per 1,000 females 15-17 yers of age in 2006.[40]

Figure 4.9 Sexual Activity among Hawai'i Public High School Students vs. U.S. High School Students: 2007

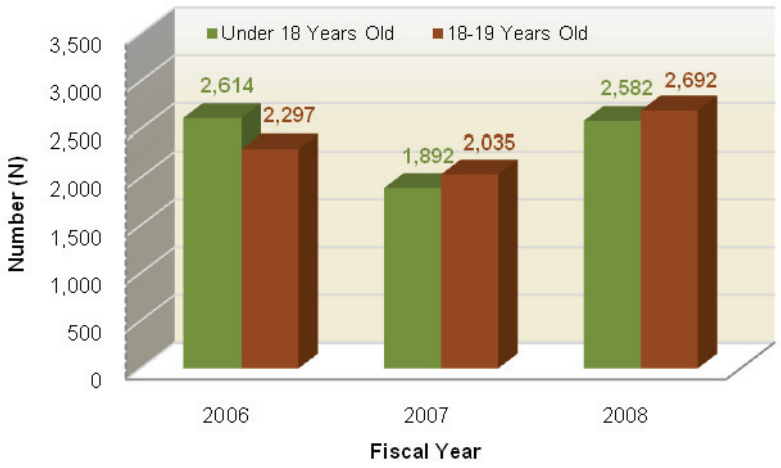


Source: University of Hawai'i, Curriculum Research and Development Group (CDRG). Hawai'i Youth Risk Behavior Survey (YRBS).
Note: YRBS is administered in odd-numbered years in Hawai'i's public middle and high schools.
Note: * Denotes a significant statistical difference at p=0.05.

In 2007, 36.2% of high school students in Hawai'i reported being currently sexually active compared to the 47.8% nationally. Public high school students in Hawai'i report lower estimates of sexual intercourse, current sexual activity than other high school students nationally. Among those that are sexually active, more than a half didn't use a condom at last sexual intercourse. About a quarter of those sexually active report using alcohol or other drugs just prior to last sexual intercourse.[35]

Program Highlight:

Figure 4.10 Adolescents through 19 years of Age Receiving Family Planning Services: 2006-2008



Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Family Planning Program. Data reflects Fiscal year (July 1-June 30).

The **Family Planning Program** (FPP) in the Maternal and Child Health Branch (MCHB) ensures access to affordable birth control and reproductive health services to all individuals of reproductive age with a priority on low income and hard-to-reach individuals including adolescents. Services are offered free or at low cost, including education, counseling, cervical and breast exams, provision of appropriate contraceptive methods, testing for pregnancy and sexually transmitted infections. In FY 2008 there were 2,582 women under 18 and 2,692 women 18-19 years of age that received direct services through FPP contracts.

There are 13 **Family Planning Program** (FPP) health education and outreach service contracts throughout the state who target *hard-to-reach* populations including adolescents, immigrants, low-income, under/uninsured, limited-English-proficiency (LEP), and homeless. The educators coordinate with clinical providers to reach to those in need of services and routinely work with schools, community organizations, faith communities, and youth centers to promote family planning and related preventive health services. These programs include information regarding abstinence, relationships, puberty, anatomy and physiology, and contraceptive information. An estimated 43,149 health education contacts were made with adolescents through the FPP in FY 2008.

Other Program Activities:

- The Adolescent Wellness program within MCHB coordinates the federal **Abstinence Only Education** (AOE) grant. Since 1998, the Boys and Girls Club of Hawai'i (BGCH) utilizes a positive youth development approach to prepare participants to make healthy decisions while including the long-term benefits of postponing sex. The curriculum helps build young people's social and decision-making skills to make healthy choices and recognize the importance of supportive peer and adult relationships.
- The Adolescent Wellness Program convenes the joint Department of Education and Department of Health **School Survey Committee** that supports the implementation of population based surveys to monitor risk behaviors that contribute to mortality, morbidity and social problems among youth.
- A Memorandum of Agreement (MOA) between MCHB and the Department of Human Services (DHS) ensures the **Temporary Assistance to Needy Families** (TANF) funding for teen pregnancy prevention programs is reaching the vulnerable populations. The Adolescent Health Program staff provides technical assistance and quality assurance monitoring of TANF teen pregnancy prevention programs.

Unintentional Child Injuries

Goal: To Reduce Rate of Unintentional Child Injury

Issue:

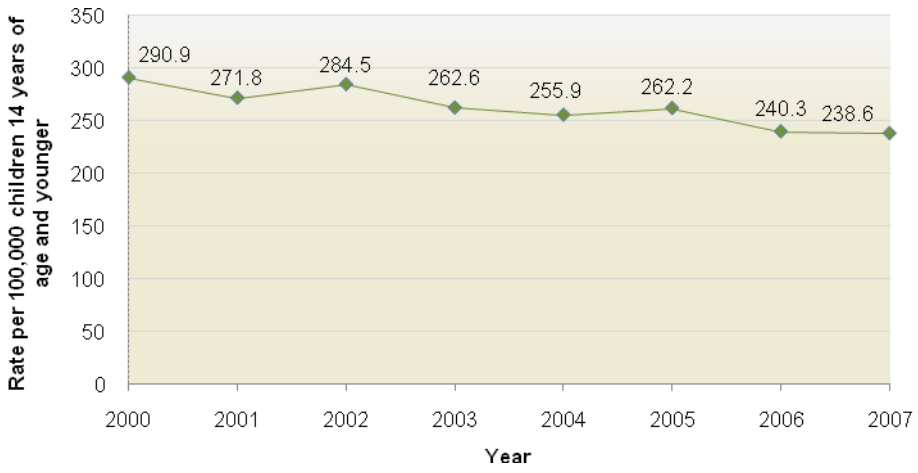
Injuries are the leading cause of death among children with about half of all deaths in children aged 1-14 years due to injuries. Close to 80 percent of these are from motor vehicle crashes with drowning, falls, accidental poisonings and suffocation the other leading causes. Serious *nonfatal* unintentional injuries account for 84 percent of injury-related hospitalizations and result in an estimated $108 billion in lifetime medical costs. (A lifetime cost is defined as the total cost of an injury from onset until either complete cure or death). Many deaths due to injury can be prevented by reducing risk factors such as speeding, underage drinking, use of other drugs, lack of restraint use or use of helmets and not using the crosswalk. Increasing awareness and education relates to parental or caregiver supervision for young children, safe sleep practices for infants, safety restraints for adolescents and graduated drivers license classes.[2,41]

Healthy People 2010 Objective:

Reduce emergency department visits for nonfatal unintentional injuries among all ages to 9,000 emergency department visits per 100,000 population.

Population Based Data:

Figure 4.11 State of Hawai'i, Non-Fatal Injuries among Children 14 years of Age and Younger: 2000-2007



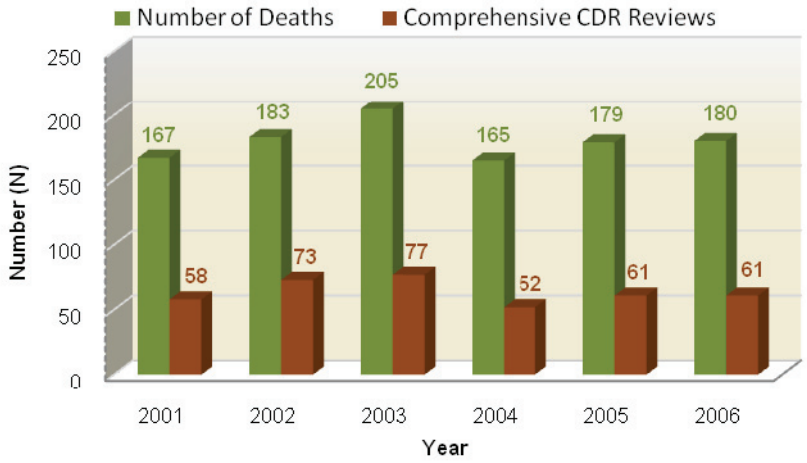
Source: Hawai'i Health Information Corporation, Hospital discharge data.

Data from the National Electronic Injury Surveillance System in 2007, report the national rate of unintentional nonfatal injuries among children 14 years of age and younger as 9,952 per 100,000 population.[41] Whereas, analysis of data from the Hawai'i Health Information Corporation show that the rate of non-fatal injuries that resulted in a hospitalization in Hawai'i is 238.6 per 100,000 children 14 years of age and younger. This rate in Hawai'i has declined but remains fairly stable since 2000.

Nationally, the unintentional injury death rate among those aged 0 to 19 years was 15 per 100,000 children aged 0-19 years, with Hawai'i having a lower rate of 11 per 100,000 in a recent report covering 2000-2005 data.[41]

Program Highlight:

Figure 4.12 State of Hawai'i, Number of Deaths and Cases Referred for Comprehensive Reviews by Year of Death in Children 0-17 Years of Age: 2001-2006



Source: Hawai'i State Department of Health. Office of Health Status Monitoring.
Source: Hawai'i State Department of Health, Family Health Services Division, Maternal and Child Health Branch, Child Death Review Program Data. Preliminary Data.
Note: Comprehensive CDR Reviews were done by multidisciplinary teams in various time periods so chart does not depict when the reviews actually occurred.

The Maternal and Child Health Branch administers the Child Death Review (CDR) Program was established under Act 369 SLH 1997 to conduct systematic multidisciplinary reviews of child deaths 0-17 years of age. This statewide system of community-based teams examines risk factors related to five manners of death of which one is Unintentional Injury Deaths. Discussions at the reviews provide opportunities to share practices and policies. Data is collected to identify risk factors and trends in child deaths. Of the 1,079 deaths to residents and non-residents in Hawai'i from 2001-2006, all were reviewed by state CDR with 382 identified for comprehensive review by local CDR teams.

Recommendations for prevention strategies such as system changes, policy development, community education and training areas are made to expand community partner efforts to promote child health and safety to prevent child deaths. Examples include:Coordination with DOH Injury Prevention and Control Program and the Keiki Injury Prevention Coalition on legislation and training for car safety restraints, booster seats, and graduated licensing; and promotion of drown-proofing for children through county learn-to-swim programs and private lessons was recommended in Kauai.

Other Program Activities:

- Division and MCHB staff collaborates with the Department of Health Injury Prevention and Control Program (IPCP) to provide data, identify best practices, assess, plan and develop legislative policies to enforce injury prevention. Currently, the Division is partnering with IPCP and the national Children's Safety Network to develop a state training program and toolkit, **Weaving a Safety Net**, that assures injury and violence prevention are integrated into Maternal and Child Health programs.
- Hawai'i was selected as the pilot site in 2009 because of the long history of collaboration between the Injury Prevention program and the Family Health Services Division. Over the next 2 years, the project will build on and identify best practices in Hawai'i through an assessment of current practices, identify program improvements that can be implemented, and provide technical assistance and training to improve practices for service programs. Results from the project will be documented and used as a model for other states.
- Division programs and service contractors distribute the injury prevention pamphlet developed for Hawai'i "**What To Do When Keiki is Hurt**" including programs like WIC, Healthy Start, Parenting Support program contracts. The information is also included in the Keiki 'O Hawai'i, a parenting support publication given to all new mothers in the hospitals statewide. Pamphlets are also provided to Department of Human Services licensed child caregivers, Department of Education health room staff and special education teachers.
- **Perinatal Support Services** within the Maternal and Child Health Branch provide funding for incentives for clients to adopt healthy behaviors and remain in the program. For example, the Na Lei Lokahi program that provides services to Oahu's North Shore at Kahuku Hospital purchased infant car seats for new mothers. Other perinatal support services programs have trained and certified staff to conduct keiki car seat clinics at Waianae Coast Comprehensive, Waimanalo, and Kalihi-Palama Health Centers.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

- CSHCN Family Decision-Making and Satisfaction
- Medical Home
- Early Screening & Intervention
- CSHCN Community Based Services
- Transition for Youth with Special Health Care Needs
- Genetics

Children with Special Health Care Needs Overview

Children with Special Health Care Needs

Children with special health care needs (CSHCN) are defined as children who have or are at risk for a chronic physical, developmental, behavioral, or emotional condition(s) and who require health and related services of a type or amount beyond that required by children generally.

CSHCN represent a significant population in Hawai‘i. Due to the complexity of their health needs, and the need to assure access to comprehensive, coordinated, community-based services, increasing attention has been focused on CSHCN. In Hawai‘i there are an estimated 36,066 CSHCN or 12% of all children age 0-17 years based on data from the National Survey of CSHCN.[42] Data indicate that the prevalence of CSHCN rises with age, there are more males than females, CSHCN cross all income levels, and Asians have a lower prevalence rate compared to other race/ethnic groups.

The National Agenda for Children with Special Health Care Needs: Developing Systems of Care

Developed in 1989, this agenda calls for the development of systems of care for CSHCN that are family-centered, community-based, coordinated and culturally competent.

The long-term outcome of systems development is that all families are able to access health and related services along the continuum of care in a manner that is both affordable and meets their needs; policies and programs are in place to guarantee that children have access to quality health care; providers are adequately trained; financing issues are equitably addressed; and families play a pivotal role in how services are provided to their children.

As part of the national agenda for CSHCN, the MCH Bureau has established six core outcomes for CSHCN:

- Families of CSHCN partner in decision-making at all levels and are satisfied with the services they receive.
- CSHCN receive coordinated, ongoing, comprehensive care within a medical home.
- CSHCN have adequate private and/or public insurance to pay for the services they need.
- Children are screened early and continuously for special health care needs.
- Community-based service systems are organized so families can use them easily.
- Youth with special health care needs receive the services necessary to transition to adult life, including adult health care, work, and independence.

CSHCN Family Decision Making and Satisfaction

Goal: Increase the Number of Families with CSHCN Who Partner in Decision Making and Are Satisfied with the Services They Receive

Issue:

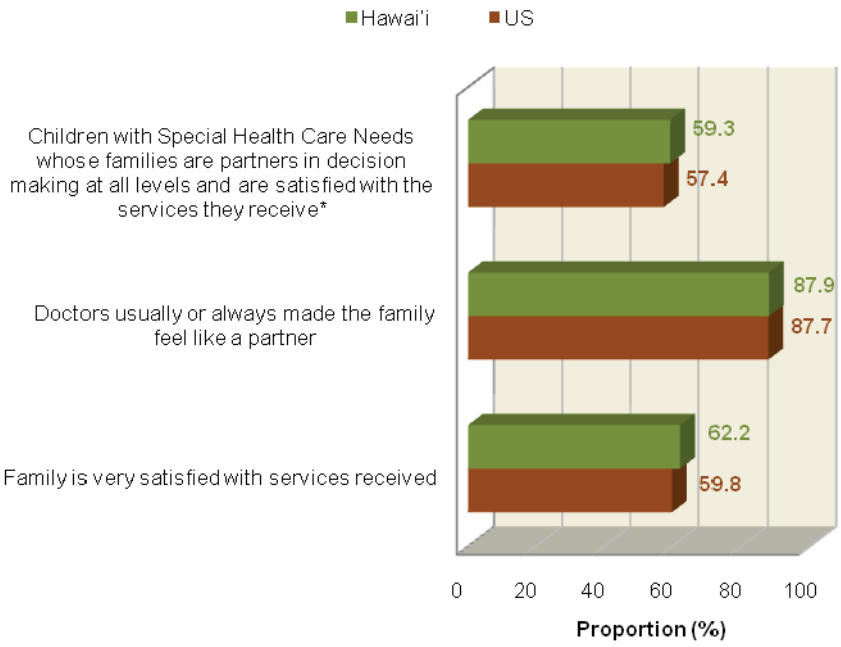
Families have a key role in assuring that services address the needs of children with special health care needs. Families must be involved in decision-making at all levels, from direct care for children to development of the service system, including policy development and program planning at local, community and state levels. A challenge for many programs and agencies is involving and partnering with families at program and policy levels, and supporting families in their role as partners.[43,44]

Healthy People 2010 Objective:

Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.

Population Based Data:

Figure 5.1 Family Professional Partnerships among Children with Special Health Care Needs in Hawai'i and the US: 2006



Source: U.S. Department of Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of Children with Special Health Care Needs, 2005-2006.
Note: *CSHCN outcome, derived from other survey items.

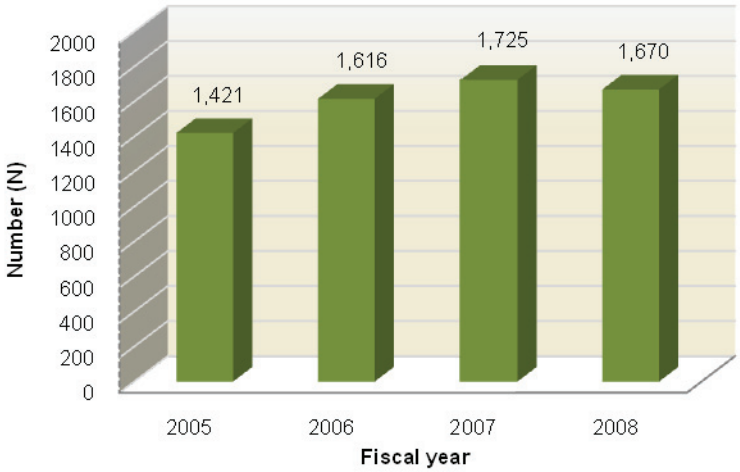
Hawai'i data from the National Survey of CSHCN showed improvement from 2001 to 2006 in the area of family partnership with medical professionals and family satisfaction with services. In 2006, 59.3% of CSHCN families reported being partners in decision-making and were satisfied with services compared to 52.4% in 2001.[42] The greatest improvement was seen in the percentage of CSHCN families who reported their doctors made them feel like partners (87.9% in 2006 compared to 80.8% in 2001).

In 2006, Hawai'i CSHCN families reported rates of partnership and satisfaction that were similar to the national average (no statistical difference).

Program Highlight:

Figure 5.2 Number of Children Served by the Children with Special Health Needs Program

The **Children with Special Health Needs Program** (CSHNP) within the CSHNB provides health support to children with special health care needs (CSHCN) up to age 21 years, who have long-term or chronic medical conditions that require specialized care. CSHNP provides information and referral, outreach, care coordination, social work, and nutrition services. CSHNP also provides financial assistance for medical specialty services as a "safety net" and "last resort" for eligible children who have no other resources; assists families on the Neighbor Islands to access medical specialty providers; and coordinate community services for families with craniofacial disorders served at a comprehensive clinic. Staff work with families in partnership to assure health.



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Hilopa`a Project. Data reflects calendar year (January 1- December 31).

Other Program Activities:

- The **Hilopa'a Project-Integrated Systems for CSHCN** is a collaborative project of CSHNB and Family Voices, with American Academy of Pediatrics (AAP)-Hawai'i Chapter and University of Hawai'i (UH) Department of Pediatrics. The Hilopa'a Project promotes increased family participation in program and policy activities. Guidelines on Compensation for Family Participation were developed, implemented, disseminated to other programs. Parents of CSHCN were identified and linked as community facilitators for: a Medicaid Infrastructure grant; faculty for MCH Leadership in Education in Neurodevelopmental and Related Disabilities Program (MCH LEND); core committee to develop an Early Intervention parent-to-parent network; advisory committee for nurse practitioner fellowship program; DOH/Developmental Disabilities Division Statewide Advisory; and State Council on Developmental Disabilities/Health and Early Childhood Committee. Project conferences and trainings for families and self-advocates included: Convergence 2006 on developing family leaders and family-professional partnerships in program and policy activities; workshops on Building Natural Supports; and Extreme Makeover conference on best practices, tips, and techniques on Family Training.
- The **Children with Special Health Needs Branch** (CSHNB) promotes the involvement of families of CSHCN in various ways. Families participate as council, task force, and advisory committee members; develop and review parent education materials; participate in presentations and panels; participate in interviewing applicants for staff positions; provide testimony on legislative bills; and advise on policy issues. Family participants are of diverse ethnic and cultural backgrounds.
- The **Hawai'i Early Intervention Coordinating Council** (HEICC) requires that at least 20 percent of the members shall be parents of infants or toddlers with disabilities or children with disabilities aged 12 or younger, and that at least 1 member shall be a parent of an infant or toddler with a disability or a child with a disability aged 6 or younger.
- Family members also participate on the **Newborn Metabolic Screening Advisory Committee**, Early Hearing Detection and Intervention Advisory Committee, State Genetics Advisory Committee, and other committees.
- The **Family Trainers Academy** (2008) was an initiative of the Hawai'i MCH LEND Program with the Hilopa'a Project. The summer institute focused on developing community based trainers to serve families, their professional partners and the local Community Children's Councils. Trainees include parents and self-advocates from all islands.

Medical Home

Goal: To Increase the Number of Children with Special Health Care Needs Who Have a Medical Home

Issue:

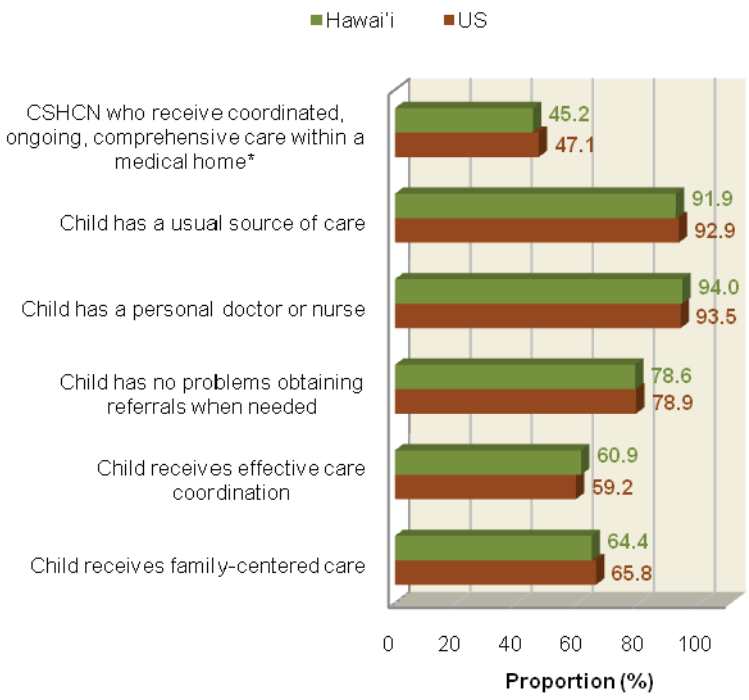
All children, including those with special health care needs, should have a medical home. As described by the American Academy of Pediatrics (AAP), the medical home is a model of delivering primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective. The medical home provides ongoing primary care, assists in identifying special health care needs, and coordinates with a broad range of other specialty, related services, and appropriate community resources for the optimal health of the child. Challenges for medical homes include the increased time needed to coordinate services especially for children with complex special needs, having the knowledge about community resources, and appropriate financing to support the medical home.[44,45]

Healthy People 2010 Objective:

Increase the proportion of children with special health care needs who have access to a medical home. Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.

Population Based Data:

Figure 5.3 Medical Home Related Data among Children with Special Health Care Needs in Hawai'i and the US: 2006



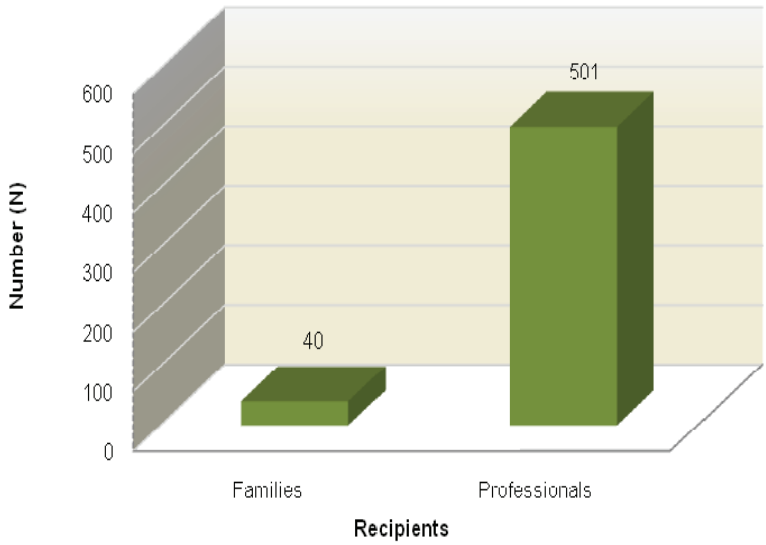
Source: U.S. Department of Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of Children with Special Health Care Needs, 2005-2006.
Note: *CSHCN outcome, derived from other survey items.

Hawai'i data from the 2006 National Survey of CSHCN showed similar estimates for CSHCN receiving coordinated, ongoing, comprehensive care within a medical home, CSHCN having a usual place to go for sick care, CSHCN reporting having a personal doctor or nurse, CSHCN had no problem obtaining referrals when needed, CSHCN received effective care coordination, CSHCN received family-centered care, and the percentage of Hawai'i CSHCN that reported having a medical home was comparable to the national average (no statistical difference).[42]

Program Highlight:

Figure 5.4 Number of Medical Home Guides Distributed to CSHCN and Their Families: 2006-2009

CSHNB with the **Hilopa'a Project** developed the "Rainbow Book–A Medical Home Guide to Resources for CSHCN and Their Families" to promotes navigating and accessing community-based services. The Rainbow Book provides information about various community resources including early childhood, health, developmental disabilities, neurotrauma, Medicaid, Supplemental Social Security, military services for CSHCN, and transition to adult life. Rainbow Book training has been provided to individuals from various agencies and programs; participants have included family members, pediatric residents, service/care coordinators, nurses, physicians, and social workers. From Grant Year 2006-2009, 501 professionals and 40 families received tranining on the Rainbow Book.



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Hilopa`a Project. Data reflects Grant year (May 1-April 30).

Other Program Activities:

- All programs in the **Children with Special Health Needs Branch** (CSHNB) promote the concept of the medical home. Programs work to ensure that every child served has a primary care provider.
    - The **Early Intervention Section** invites the child's medical home to Individual Family Support Plan (IFSP) conferences.
    - The **Children with Special Health Needs Program** (CSHNP) supports the medical home by assisting families of CSHCN age 0-21 years with access to services. CSHNP provides service coordination, social work, and medical nutrition therapy; pediatric cardiology and neurology clinics on the islands of Hawai'i , Kauai, and Maui where services are not available; and financial assistance for medical specialty services for eligible children who have no other resources.
    - The Newborn Metabolic Screening, Newborn Hearing Screening, and the Preschool Developmental Screening Programs coordinate their services with the medical home.
    - The **Genetics Program** supports the medical home by increasing the access to genetic services in the community.
- The federal **Early Childhood Comprehensive System (ECCS) grant** administered by the Division has developed a state ECCS plan that includes two medical home goals–"Family-centered care and family/professional partnerships will be key elements of medical homes" and "Developmental surveillance, periodic screening, and follow-up for children ages 0-5 years will be improved." Early Childhood providers throughout the state are working in collaboration to implement the plan objectives.

Early Screening and Intervention

Goal: To Improve Access to Early Screening and Intervention Services

Issue:

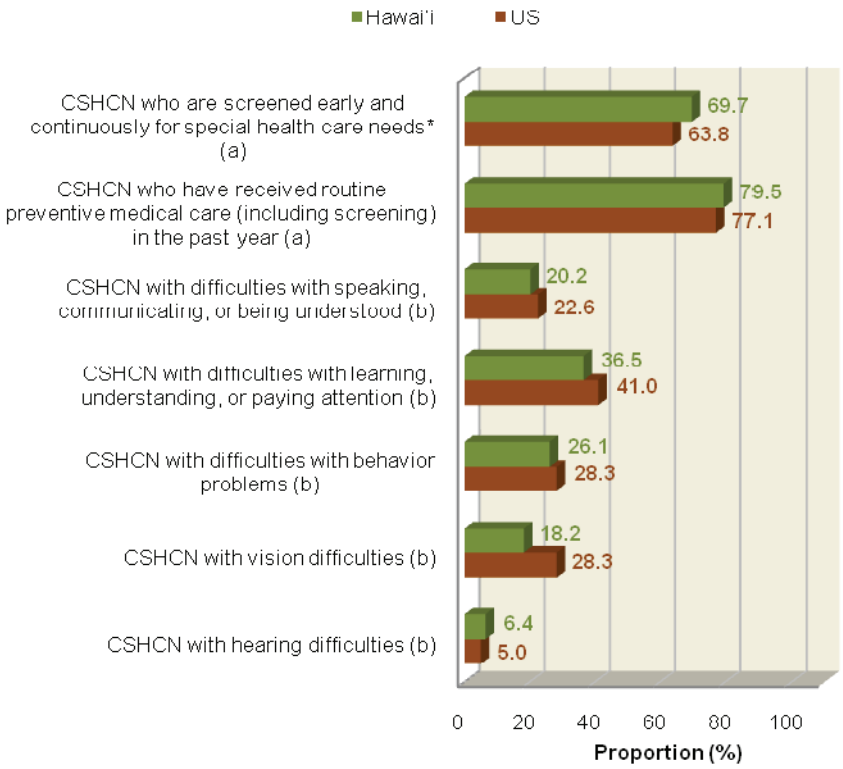
Special health needs must be identified early to assure that infants and children receive care and resources to promote optimal development. When concerns are identified, there must be appropriate follow-up, which may include monitoring, evaluation, diagnosis, and intervention/treatment. Challenges for screening include medical homes having adequate office staffing, adequate time for screening and follow-up, adequate payment by insurance; and community programs coordinating and linking their screening/follow-up services with the medical home.[44,46]

Healthy People 2010 Objective:

Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems. Reduce the occurrence of developmental disabilities (includes reduction in age of identification).

Population Based Data:

Figure 5.5 Data Related to Screening and the Need for Early Identification among Children with Special Health Care Needs in Hawai'i and the US: 2006



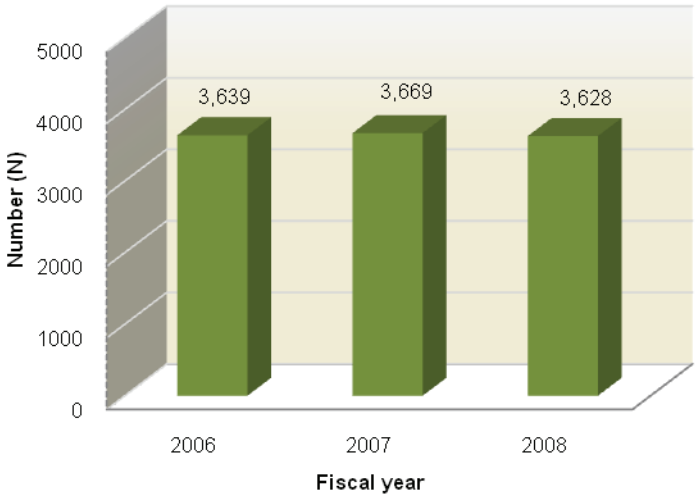
The Hawai'i rate for CSHCN who are screened early and continuously for special health care needs was 69.7% which was significantly higher than the national average of 63.8%. The rate for Hawai'i CSHCN who received routine preventive medical care was 79.5% which was similar to the national average of 77.1% (no statistical difference). The Hawai'i rate for CSHCN with vision difficulties was 18.2% which was significantly lower than the national average of 28.3%. The Hawai'i rates for the other developmental problems were similar to the national average (no statistical difference).[45]

Source: (a) U.S. Department of Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of CSHCN, 2005-2006. (b) **Child and Adolescent Health Measurement Initiative**. National Survey of CSHCN 2005-2006, Data Resource Center for Child and Adolescent Health website www.cshcndata.org. Note: *CSHCN outcome, derived from other survey items.

Program Highlight:

Figure 5.6 Children under 3 Years of Age with or At Risk for Developmental Delays Receiving Early Intervention Services: 2006-2008

The **Early Intervention Section** (EIS) within the Children with Special Health Needs Branch is responsible to ensure that any child from birth to three years of age at risk for a developmental delay receives a timely, multidisciplinary, comprehensive developmental evaluation and services as identified on the child's Individual Family Support Plan. Services are also provided to family members to support their ability to work with their child. It is a federal and state-mandated program that provides services to support the development of infant and toddlers. Within the DOH, EIS is responsible to ensure that Hawai'i meets all the requirements of Part C of Individuals with Disabilities Education Act (IDEA) including providing evaluation and services within required timelines. The Early Intervention Section is also responsible for ensuring that all Part C eligible children in Hawai'i receive the services necessary to support their development. In FY 2008, 3,628 children received early intervention services, similar to those served in FY 2006 and FY 2007.



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Early Intervention Section. One day count of children receiving services on December 1 for each year.

The Early Intervention Section also administers the **Hawaii Keiki Information Service System** (H-KISS) which provides families with referrals to appropriate programs for services based on the individual needs of the child.

Other Program Activities:

- The **Preschool Developmental Screening Program** (PDSP) promotes early identification and intervention for developmental, learning, behavioral, and social-emotional problems for children age 3-5 years. PDSP trains community resources in standardized developmental/ behavioral screening and provides screening as needed. PDSP provides consultation and facilitates follow-up for developmental/behavioral concerns.
- The **Healthy Start** program in the Maternal and Child Health Branch is designed to identify and intervene with eligible environmentally at-risk families, as part of the expanded definition of special needs governed by Part C of IDEA. The program conducts statewide, universal population-based screening, assessment, and referral. Eligible families screened and assessed positive are offered home visiting services in order to reduce the risk of child maltreatment.
- CSHNB supported the **Screening Task Force**, which was established by Senate Concurrent Resolution 70, H.D. 1 of 2006 Legislature. The Task Force identified areas for further action, including improving vision and hearing screening for preschool/school-aged children.
- CSHNB supported the **Autism Spectrum Disorders (ASD) Benefits/Coverage Task Force**, established by Act 221 of the 2008 Legislature. Recommendations include increasing education/training for primary care providers on ASD screening and follow-up, and ASD screening be covered by health insurance.
- The **Hilopa'a Project** provided training on developmental screening tools for community health centers, community physicians, and pediatricians.
- The **Newborn Metabolic Screening Program** and the **Newborn Hearing Screening Program** ensures that infants born in the state of Hawai'i are satisfactorily tested for metabolic and hearing disorders which can cause mental and growth retardation. The programs ensure that identified infants provided with appropriate and timely intervention and treatment.

CSHCN Community Based Services

Goal: To Increase the Number of Families with CSHCN Who Have Access to Easy-to-use Community-based Service Systems

Issue:

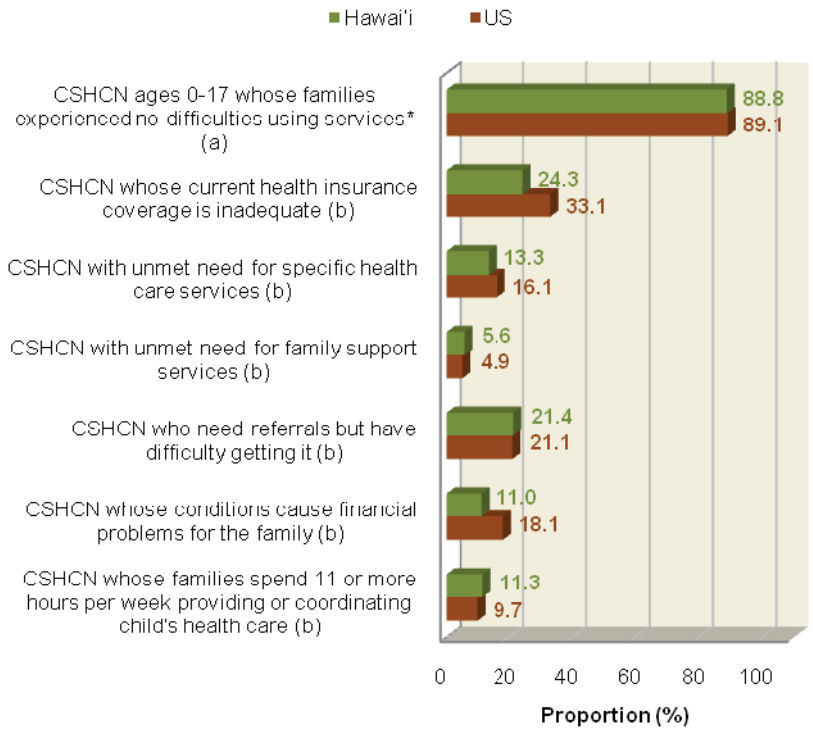
Children with special health care needs should receive their care in family-centered, comprehensive, and coordinated systems that are designed to promote the healthy development and well-being of children and their families. These systems of services need to be organized so that needed services are available and accessible, and there is a family-friendly mechanism to pay for them. The medical home is an integral part of the community-based system, working with a team that assists the family in coordinated access to a broad range of health, social, and other services. Challenges confronting families include differing eligibility criteria for services, duplication and gaps in services, poor coordination among services, inflexible funding streams, and inadequate insurance coverage for needed services.[43,44]

Healthy People 2010 Objective:

Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems. Reduce the proportion of families that experience difficulties or delays in obtaining health care, or do not receive needed care for one or more family members.

Population Based Data:

Figure 5.7 Community Based Service Systems Data among Children with Special Health Care Needs in Hawai'i and the US: 2006



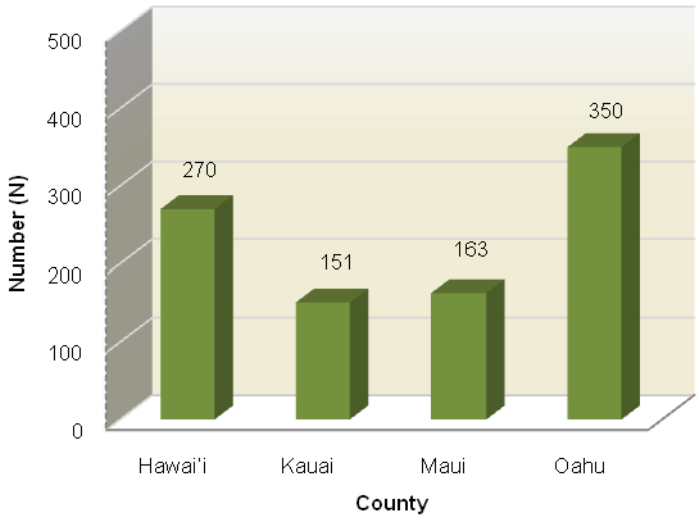
The Hawai'i rate for CSHCN whose families experienced no difficulties using services, unmet health care services, and unmet need for family support services were all similar to the national average (no significant differences). However, the Hawai'i rate for inadequate insurance coverage of 24.3% was significantly less than the U.S. average of 33.1%.[42] The Hawai'i rate for CSHCN whose conditions cause financial problems for the family was 11.0% was also significantly less than the U.S. average of 18.1%.

Source: (a) U.S. Department of Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of CSHCN, 2005-2006. (b) Child and Adolescent Health Measurement Initiative. National Survey of CSHCN 2005-2006, Data Resource Center for Child and Adolescent Health website www.cshcndata.org.
Note: *CSHCN outcome, derived from other survey items.

Program Highlight:

Figure 5.8 Children with Special Health Care Needs Age 0-21 Years Receiving CSHNP Services by Island: 2008

The Children with Special Health Needs Program (CSHNP) increases access to medical services on Neighbor Islands. CSHNP social workers on the islands of Hawai'i (Hilo, Kona), Maui, and Kauai provide service coordination, social work, and outreach services. CSHNP provides Pediatric Cardiology, Neurology, and Nutrition Clinics on the islands of Hawai'i, Kauai, Maui, and Molokai where services are not available; pediatric cardiologists, neurologist, and nutritionist travel from Oahu to these clinics. For eligible Neighbor Island children who need medical services which are not available on their island, and whose health insurance does not cover their travel, CSHNP coordinates and arranges travel and lodging for pediatric specialty services on Oahu. As needed, the CSHNP nutritionist provides tele-nutrition services from an Oahu office to children and their families located at Neighbor Island clinics. These tele-nutrition clinics provide the opportunity for as close to a face-to-face visit without requiring inter-island travel.



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch. Data reflects calendar year (January 1 – December 31).

Other Program Activities:

- The programs within **Children with Special Health Needs Branch** (CSHNB) work to assure that all children and youth with special health care needs (CSHCN) will reach optimal health, growth, and development, by improving access to a coordinated system of family-centered health care services and improving outcomes, through systems development, assessment, assurance, education, collaborative partnerships, and family support. The following programs are responsible for the development of statewide systems of services:
    - The Newborn Hearing Screening Program is responsible for the statewide system of newborn hearing screening
    - Newborn Metabolic Screening Program is responsible for the statewide system of newborn metabolic screening
    - The Early Intervention Section is the lead for Part C of the Individuals with Disabilities Education Act (IDEA) for early intervention (EI) services for children age 0-3 years with or at risk for developmental delays in Hawai'i.
- The **Genetics Program** works toward coordinated systems of services, by increasing access to services, reducing gaps in services, increasing community resources, and supporting coordination of health, social, and other services to assure the availability and accessibility of quality genetic services in the state. The Genetics Program provides funding, genetic counseling services, and technical assistance for the Hawai'i Community Genetics (HCG) clinical genetics unit.

Transition for Youth with Special Health Care Needs

Goal: To Improve Transition Services for Youth with Special Health Needs

Issue:

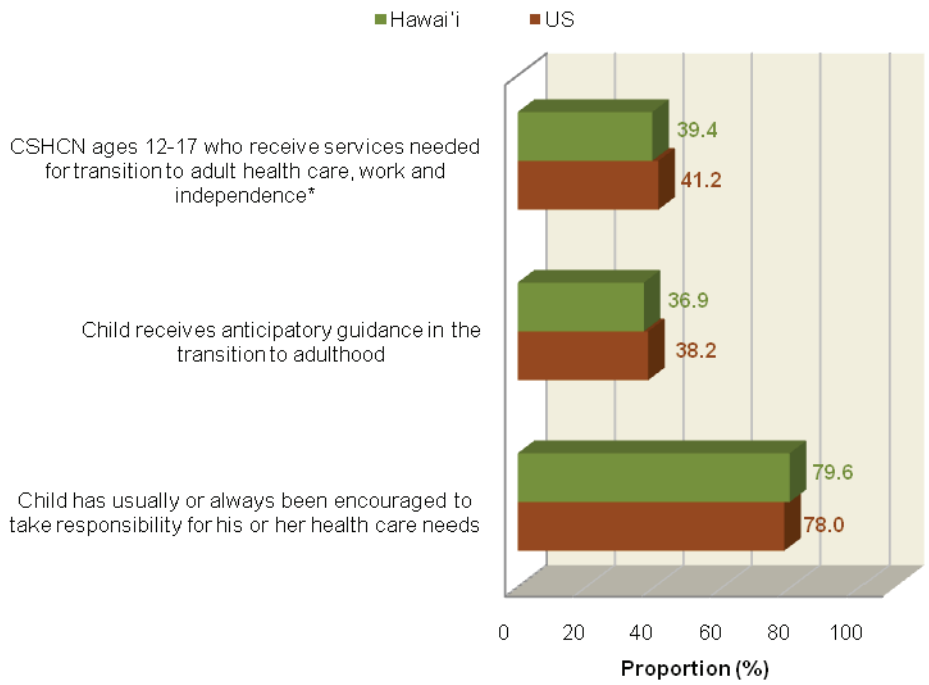
Youth with special health care needs must be able to expect good quality health care, employment, and independence when they reach adulthood. Youth must have access to quality health services, affordable health care, and insurance coverage, and be prepared with the necessary skills and knowledge. The community environment, including education and employment, must be inclusive and support the youth in their transition to adult life. The medical home must assist with the transitions, especially to adult health care. Challenges to successful transition include youth, their families, health care providers, and community providers having the information, tools, resources, and strategies to support youth in their successful transition to adult life; the availability of adult health care providers; and an inclusive community environment. [43,44]

Healthy People 2010 Objective:

Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems. Reduce the proportion of families that experience difficulties or delays in obtaining health care, or do not receive needed care for one or more family members.

Population Based Data:

Figure 5.9 Transition Services Related Data among Children with Special Health Care Needs in Hawai'i and the US: 2006



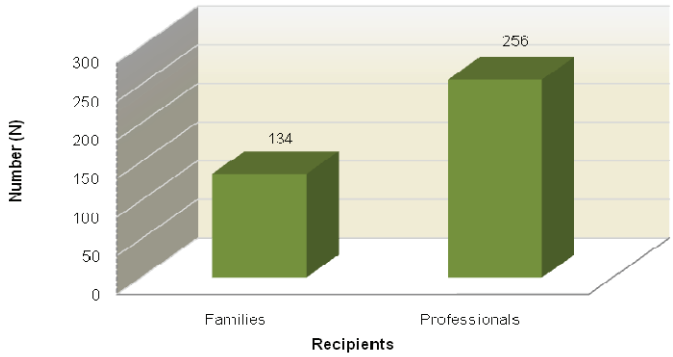
In Hawai'i, 39.4% of CSHCN 12-17 years of age received necessary services for transition; 36.9% received anticipatory guidance, and 79.6% were encouraged to take responsibility for his or her health needs. These rates were similar to the U.S. averages (no significant differences).[42]

Source: U.S. Department of Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of Children with Special Health Care Needs, 2005-2006.
Note: *CSHCN outcome, derived from other survey items.

Program Highlight:

Figure 5.10 Number of Transition Planning Workbooks Distributed to CSHCN and Their Families: 2007-2009

The **Hilopa'a Project** supports successful transition through providing information, tools, resources, and strategies to support youth in their successful transition to adult life, including adult health care providers. A **Transition Planning Workbook** for families of CSHCN was developed. It includes tasks/activities, decisions, timeline and resources, and is a planning guide for families, as well as a facilitation guide for providers/programs to talk with families. Workshops were provided for 134 families of CSHCN and 256 professionals including Children with Special Health Needs Program (CSHNP) staff, Medicaid Supervisors, and Case Managers.



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Hilopa'a Project. Data reflects Grant year (May 1-April 30).

Workshops prepare families at different stages to gain knowledge to enhance decision-making and empowerment to help their child/youth transition to adulthood. The workbook has been distributed to other states.

Other Hilopa'a projects that aid in transition to adulthood include:

- "**Rainbow Book**–A Medical Home Guide to Resources for CSHCN and Their Families" includes programs/services for transition to adult life, including education, higher education and disability access, employment, and vocational rehabilitation. Trainings have been conducted for health professionals, agency staff, families, and others on all islands.
- The Project supported the implementation of a **Pediatric and Family Practice Residency Curriculum** which extends teaching knowledge, skills, and attributes of the Medical Home to include integrated service system roles. Sessions included information on transition.
- T**ransition service delivery models** were presented to the medical directors of health insurance plans.
- The Family Convergence 2006 Conference brought more than 120 participants together. Sessions by family-professional teams included Transitioning Into the System – Life After Early Intervention, and Transitioning Out of the System – Life After High School.

Other Program Activities:

- The **Children with Special Health Needs Program** (CSHNP) works toward improving transition for youths with special health care needs in several ways. CSHNP develops Individual Service Plans (ISP) with CSHNP families. The purpose of the ISP is to identify family needs, services being provided, and to promote family involvement. Transition planning to young adulthood guidelines and worksheet have been developed and will be used in conjunction with the ISP. These tools will help foster focused discussion with the families and will assist the program with data collection.
- CSHNP staff attend Department of Education Individualized Education Plans or Developmental Disabilities Division meetings for CSHNP families as needed. CSHNP staff are members of several community committees, which directly or indirectly relate to transition issues and available resources for adults; including the Fetal Alcohol Spectrum Disorders Task Force, State Traumatic Brain Injury Advisory Board, and Successful Transition in Diverse Environments (STRIDE) Advisory Board.
- The foundation for transition begins in early childhood. The **Early Intervention Section** (EIS) provides training on trans-disciplinary services, teaming, and transition to staff, Department of Education (DOE) Preschool Special Education and Student Support Coordinators, Head Start, Healthy Start, public health nurses, community preschools, and family members. EIS staff provide transition planning and support for children with developmental delays exiting from Part C early intervention services. EIS addressed the provision of timely transition activities, including Transition Plans, Transition Conferences, and Transition Notices, to comply with requirements of Part C of the Individuals with Disability Education Act (IDEA).

Genetics

Goal: Improve and Maintain Statewide Access to Genetic Services

Issue:

Genetic counseling is a process of providing information and support to families who have members with birth defects or genetic disorders and to families who may be at risk for a variety of inherited conditions. Genetic counseling involves identifying families at risk, investigating the problem present in the family, interpreting information about the disorder, analyzing inheritance patterns and risks of recurrence and reviewing options for the family to improve healthy outcomes. The individuals who provide genetic counseling also provide supportive counseling to families, serve as patient advocates and refer individuals and families to community or state support services.[48]

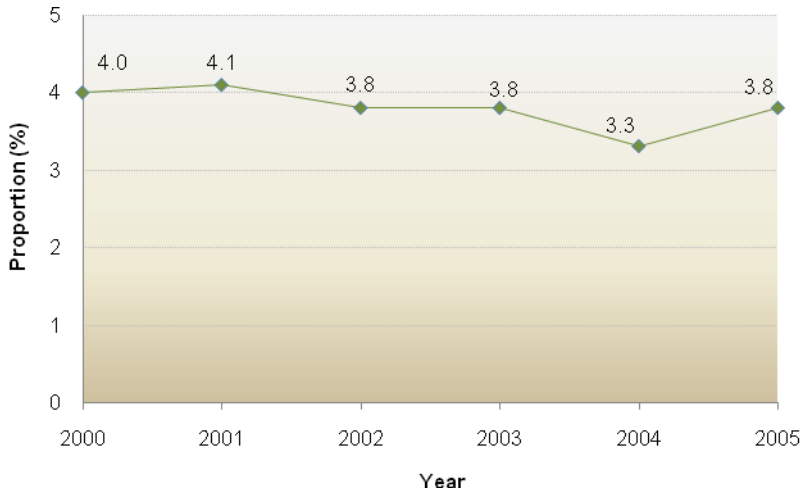
There are few genetic specialty providers in the country and Hawai'i has limited resources for genetics evaluation and counseling. Improving and maintaining access to genetics services in the state allows families to obtain genetics evaluation and counseling to improve the health of the families and future generations.

Healthy People 2010 Objective:

Reduce the proportion of families that experience difficulties or delays in obtaining health care, or do not receive needed care for one or more family members. Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.

Population Based Data:

Figure 5.11 Proportion of all Births Identified with Birth Defects in Hawai'i: 2000-2005



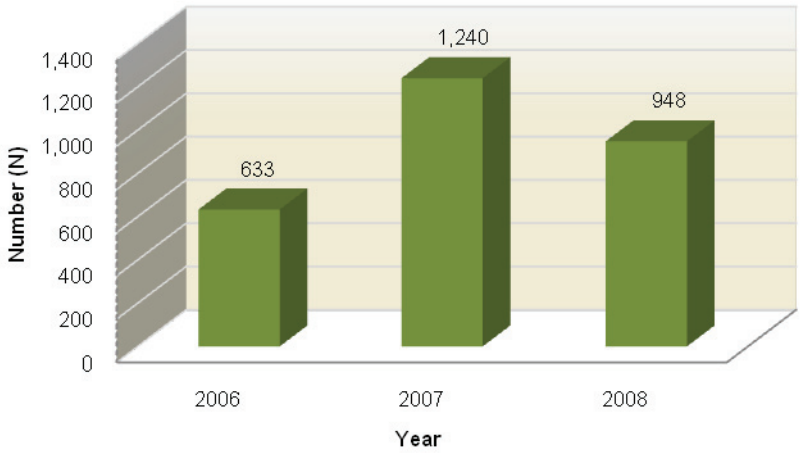
Source: State of Hawai'i, Department of Health, Family Health Services Division, Children with Special Health Needs Branch, Hawai'i Birth Defects Surveillance Report 1986-2003.

Birth defects affect about one in every 33 babies born in the United States each year. They are the leading cause of infant deaths, accounting for more than 20% of all infant deaths. Babies born with birth defects have a greater chance of illness and long term disability than babies without birth defects.[49] Besides birth defects, many genetic disorders (e.g. muscular dystrophy) do not appear until later in childhood. In addition, there are adult onset genetic disorders (e.g. Huntington disease) and some chronic diseases that have a genetic basis.

The proportion of birth defects identified in Hawai'i has remained consistent at 3.8% - 4.0% of all births since 2000 which is comparable to the national estimate of 1 out of 33.

Program Highlight:

Figure 5.12 Number of Families Receiving Genetics Consultation: 2006-2008



Source: Hawai'i State Department of Health, Family Health Services Division, Children with Special Health Care Needs Branch. Genetics Program.

The Genetics Program works collaboratively to develop and maintain the Hawai'i Community Genetics (HCG) as a state collaborative clinical genetics unit. The University of Hawai'i John A. Burns School of Medicine, Kapiolani Medical Center for Women and Children, and Queen's Medical Center are also HCG partners. The Genetics Program provides funding, genetic counseling services and technical assistance for HCG.

The Genetics Program is funded through competitive grant funds from the Health Resources and Services Administration. Genetic evaluation and counseling is provided to families in person at the Honolulu based Hawai'i Community Genetics office and at neighbor island clinics which cover Kauai, Maui, Molokai, and the Big Island (Hilo, Kona and Waimea). Consultations are also beginning to be provided using telehealth via videoconferencing and will continue to increase as telehealth is incorporated into routine clinical practice. In 2008, 948 families were seen for genetic consultation statewide, with 95 families seen in Neighbor Island Clinics. Information, treatment and management provided for these families will help them understand their genetic conditions or risk for genetic conditions and help them make choices to improve their family's health.

Genetics education to health care providers, public health staff, students, and the general public is provided through grand rounds, brown bag sessions, conferences, classroom lectures, and public talks.

The Genetics Program works closely with the community to develop policies related to genetics. One example is the development and passage of laws in Hawai'i to protect families from genetic discrimination in health insurance coverage and employment.

The Genetics Program heads the Western States Genetic Services Collaborative (WSGSC), which is one of seven Regional Genetic Collaboratives in the nation. The WSGSC includes Hawai'i, Alaska, California, Guam, Idaho, Oregon and Washington. The goal of the WSGSC is to increase access to genetic and newborn screening services to the multi-state region by sharing resources.

SPECIAL POPULATIONS

- Homeless Families
- Uninsured
- Disparity Initiatives

Homeless Families

Goal: Support and Strengthen at-Risk Families to Nurture Child Development

Issue:

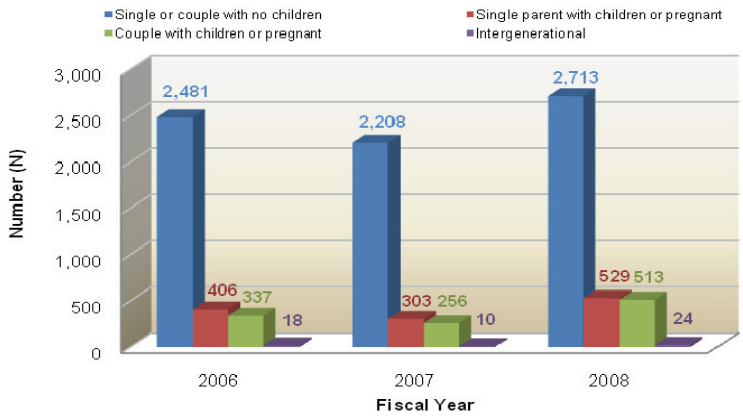
Children and families living in homelessness often suffer from conditions like poor nutrition, developmental delays, impaired health, and emotional stress with negative long-term effects that continue into adulthood, such as chronic health problems and a shortened life expectancy.[26]

Healthy People 2010 Objective:

Reduce the proportion of families that experience difficulties or delays in obtaining health care, or do not receive needed care for one or more family members. Use Communication Strategically to Improve Health**.**

Population Based Data:

Figure 6.1 State of Hawai'i, Homeless Service Utilization by Families with Children: 2006-2008



Source: University of Hawai'i, Center on the Family. Homeless Service Utilization Report. Note: Data reflects Fiscal Year (July1-June 30)

Of the 21 cities with data available, 193,183 unduplicated persons used transitional housing or emergency shelters in 2007. Of those people 23 percent were members of households with children, 23 percent were individuals, and one percent was made up of unaccompanied youth.[50]

In Hawai'i, the data on individuals who accessed services from Shelter and/or Outreach Programs that received Hawai'i Public Housing Authority (HPHA) funds show an overall increase in the number receiving services in shelter. In FY 2008, 72% of those receiving shelter services were single individuals, which is a small decrease from previous years.

However, there is a growing concern for the increased number of single (14% in FY 2008 vs. 11% in FY 2007) or couple parents with children (14% in FY 2008 vs. 9% in FY 2007) receiving shelter services. This data only reflects the number of those accessing Shelter and Outreach Programs and thus does not represent all persons experiencing homeless in Hawai'i.

Program Highlight:

The **Early Childhood Comprehensive Systems** (ECCS) implemented a pilot project at the Weinberg Village Waimanalo Transitional Shelter for integrated comprehensive health services for young children and their families living in transitional housing in 2005-2009. Families experiencing homelessness or in transition work to ensure family stability, gain employment, and obtain stable housing. Educational and resource development tools increase opportunities for parents to focus on their children's needs and interests through practical methods used at "home" and to organize documents required by schools, agencies, and government entities. Practical methods and tools are needed by parents as they transition from homelessness to stable housing while working to keep their children safe, healthy, and ready to succeed for school and life.

Other Program Activities:

- The Parenting Support Programs in the Maternal and Child Health Branch offers a **Mobile Outreach** (play and learn groups), which provides activities and programs to isolated or homeless families which promote age-appropriate parent-child interaction, communication, and positive discipline.

Uninsured

Goal: Improve and Maintain Statewide Access to Health Services

Issue:

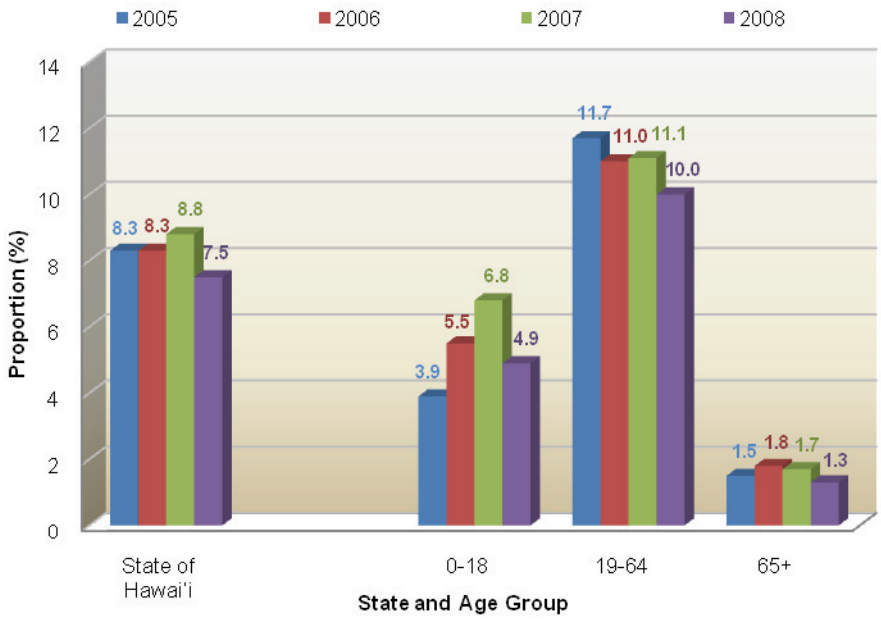
The uninsured population is at risk for a range of poor health outcomes. Access to quality care is important to eliminate health disparities and increase the quality and years of healthy life for all persons in the US. The public health system is important to educate people about prevention and addresses the need to eliminate disparities by easing access to preventive services for people less able to use existing health services. Although the lack of health insurance is clearly a major factor impeding access to care, having health insurance does not guarantee that health care will be accessible or affordable. Significant numbers of privately insured persons lack a usual source of care or report delays or difficulties accessing needed care due to affordability or insurance problems.[51]

Healthy People 2010 Objective:

Increase the proportion of persons of all ages with health insurance to 100%. Increase the proportion of persons who have a specific source of ongoing care to 96% for all ages (97% under age 18, 96% aged 18 years and older).

Population Based Data:

Figure 6.2 State of Hawai'i, Uninsured Population, Overall and by Age: 2005-2008

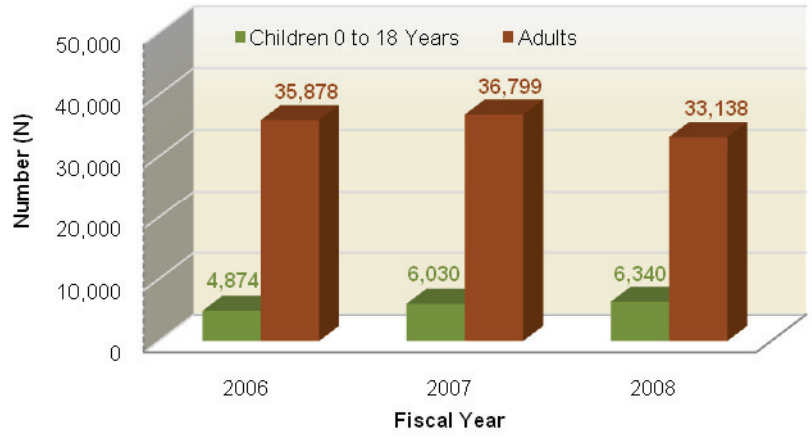


Nationally, the rate of uninsured individuals has steadily increased from 2000 to 2007 with an estimated 15.3% of all individuals not having health insurance in 2007.[1] In Hawai'i, the proportion of the population that is uninsured has generally decreased since 2005, except for those 0-18 years of age which saw an increase in 2006 and 2007 that was followed by a decrease with 4.9% of children uninsured in 2008.

Source: U.S. Census Bureau, Current Population Survey (CPS), Annual Social and Economic (ASEC) Supplement, Hawai'i Sample 2001-2008. Weighted tabulations. University of Hawai'i at Manoa. Preliminary results. Revised March 2009. Subject to further revisions.

Program Highlight:

Figure 6.3 Adults and Children Served in Community Health Centers through Primary Care Contracts: 2006-2008

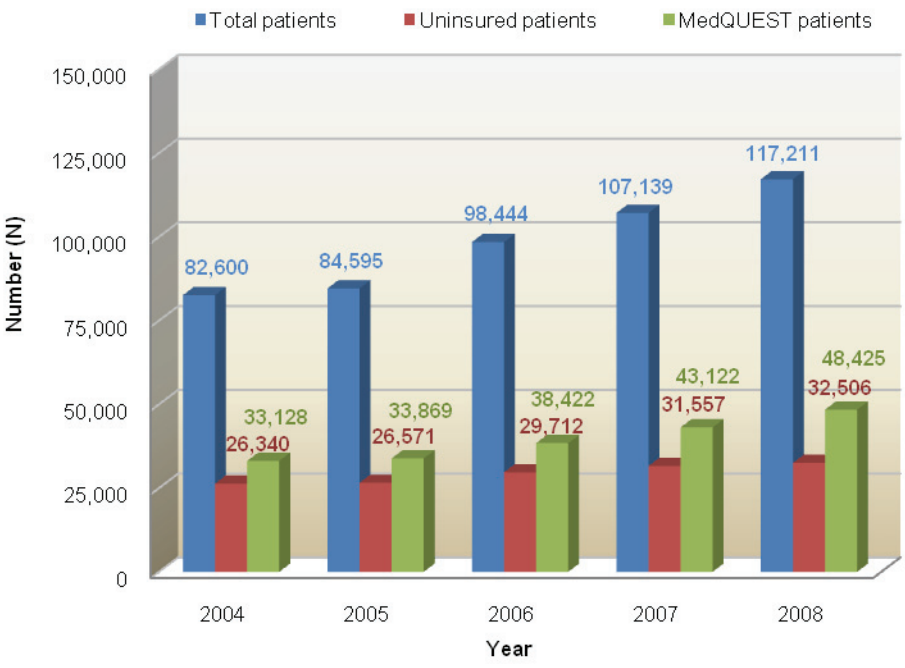


Source: Hawai'i State Department of Health, Family Health Services Division, Primary Care Office. Data reflects Fiscal year (July 1-June 30).

The Division contracts with 15 health service programs, including 13 Federally Qualified Community Health Centers (CHC), to provide a minimum of medical care and support services. An additional CHC will be joining this network on July 1, 2009 on the island of Lanai. Support services include psychosocial assessment, care coordination, information, referral, education, and outreach. Many of the programs also offer expanded services which include behavioral health, dental, and pharmaceutical services. These comprehensive primary care services are provided to those who are uninsured or underinsured.

In FY 2008, an estimated 6,340 children and 33,138 adults received services through the FHSD's Primary Care Contracts. With the changing factors in the current economy, this proportion is expected to increase. Additional data collection to discern the inability of individuals with health coverage to access providers as well as those with insufficient health care coverage needs to be assessed.

Figure 6.4 Growth of Community Health Centers in Hawai'i: 2004-2008



Source: Hawai'i Primary Care Association CEO's Report March-April 2009.

Community health centers (CHC) in Hawai'i have experienced significant growth over the past 5 years. The total number of patients seen has increased by 42% statewide, with an increase of 30% in Honolulu County and a 62% increase in neighboring Counties. Overall the number of uninsured patients increased by 23%; the number of QUEST/Medicaid patients increased by 46%; the number on Medicare patients increased by 40%; and there was a 62% increase in those with private insurance. These increases occurred with an expansion from 11 to 14 CHC's in the time period.[52] Many of these 14 CHC have multiple clinical locations with nearly 120,000 individuals seen in 2008.

Disparity Initiatives

Goal: Improve Access to Services for All Populations

Issue:

There are substantial disparities among populations in specific measures of health, life expectancy, and quality of life. Improvements for individual populations—even improvements for all of the populations for a characteristic—do not necessarily ensure the elimination of disparities. The Healthy People 2010 document lays out a framework to help the nation understand the disparities. Standardized data measures that identify high risk populations can help promote the effective implementation of critical policy development, program planning, resource allocation, and monitoring of health indicators. The elimination of disparities among all groups will focus the discussion and ensure action to ensure the same standards for health and safety among all populations.[51]

Healthy People 2010 Goal:

The second goal of Healthy People 2010 is to eliminate health disparities that occur by race and ethnicity, gender, education, income, geographic location, disability status, or sexual orientation.

Program Highlight:

- The **Sexual Violence Prevention (SVP)** within the Maternal and Child Health Branch has 3 major projects dealing with disparate populations:
    - **Micronesian SVP Immigrant Project** involves a contract with a community-based advocate to define the issue of sexual violence in the Micronesian culture by convening a community task force to explore solutions to the problem of SV. Conducted interviews and focus groups among Micronesians and Department of Human Services Child Welfare Services social workers. Developed a SVP plan for the Micronesian community. Funded by CDC Rape Prevention Education Grant for FY 2007-2008
    - The **SVP Project** for Oahu's Micronesian communities involves the development of a culturally-appropriate, gender-sensitive, and equitable educational curricula for Micronesian women, men, and services providers as part of an adult orientation program. Information on sexual attitudes within the Micronesian cultures will be made available to service providers. Funded by PHHSBG for FY 2008-2009.
    - The **SVP Project** in Molokai developed a SVP training and education sessions for community service professionals including faith-based providers, police, human service professionals on Molokai which is a small rural, predominantly Native Hawaiian island population. A five minute prevention video "Everybody's Kuleana" was produced by the community to accompany the training and to address social norms to prevent SV in all ages.

Other Program Activities:

- The **Big Island Perinatal Health Disparities Project (BIPHDP)** within the Maternal and Child Health Branch is a federally funded program to address disparities in perinatal health and birth outcomes among specific populations on the Big Island. Native Hawaiian, other Pacific Island and Hispanic women, and adolescent (regardless of ethnicity) females residing on the Big Island all have poorer overall perinatal health and birth outcomes than do other women. The BIPHDP provides support services to pregnant women of the target populations in an effort to eliminate these disparities.
    - The BIPHDP works towards system level improvement to promote perinatal health through development of the Big Island Perinatal Health Consortia. This Consortia is comprised of four local area consortium (LAC) representing four main population areas in the County of Hawai'i. Members of each LAC is very diverse and may include pregnant women, their families, doulas, midwives, childbirth educators, community and spiritual leaders, health professionals, service agencies, cultural representatives, and others interested in improving women's health. The primary goals for the Consortia are to develop core systems of Perinatal services in Hawai'i County, improve entry into first trimester care for pregnant women, reduce the incidence of low birth weight infants, reduce infant mortality rates, and increase community support through each local area consortium.
- **PSS and Baby S.A.F.E.** Program staff meet and receive ongoing training three times a year. Training on Micronesian Acculturation was held on January 9, 2009, in response to the increase of uninsured pregnant women, from the Compact of Federated States (COFA), seeking late prenatal care. This training helped Providers understand the reasons for late-entry to prenatal care by women coming from the COFA states.
    - The **Perinatal Support Services (PSS)** Program within the Maternal and Child Health Branch provide case-management of high-risk pregnancies. There are 10 statewide PSS purchase of service contracts with five community health centers, three non-profit agencies, one private physician and the Molokai General Hospital. PSS Providers offer pregnancy confirmation for uninsured pregnant women to qualify for MedQuest insurance and initiate prenatal care.
    - The **Baby S.A.F.E. Program** within the Maternal and Child Health Branch provides services to prepare substance abusing pregnant women for substance abuse treatment services. Services focus on outreach, risk assessment(s), screening, case management/care coordination and referral services. Beginning July 1, 2009 this program will be called the Perinatal Support and Triage (PSST) Program with four providers offering services.
- Within the Maternal and Child Health Branch, the **Domestic Violence Fatality Review** Team invited 3 Micronesian representatives from the Micronesian Community Network to do a presentation for members of the team, Domestic Violence Coalition members, Department of Human Services staff, and DV providers to understand the culture of the different islands in relation to law enforcement and criminal justice, courts, education, health care and social services system.
- The **Child Wellness Program** within the Maternal and Child Health Branch has translated the "Keep Me Safe While I Sleep" flyer into Chuukese and Marshallese to distribute to the Micronesian community to prevent infant deaths from unsafe sleeping conditions and environment. Contracting for translation and printing April, 2009.
- For genetics, the major health care disparity is the non-availability of genetic specialists on the neighbor islands (NI). To address this disparity, the **Genetics Program** funds and staffs neighbor island genetics clinics in Maui, Kauai, Hilo, Kona, Waimea and Molokai to increase access to genetic services for families. We rotate among the sites and do at least one NI per month. We also provide genetics telehealth sessions for neighbor island families. For NI providers, we fund or provide genetic specialists to do health care provider and public health staff education sessions.

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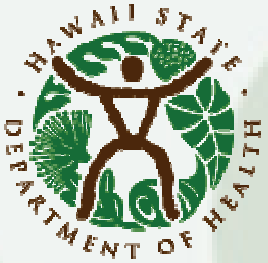
LIST OF FIGURES



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