



State Title V Block Grant Narrative

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Sections 5.4 – 5.7, containing standard forms and detailed descriptions of national and State performance and outcome measures, are not included in this PDF. Data from these sections can be viewed in interactive formats on the Title V Information System Web site (<http://www.mchdata.net>).

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1.4 OVERVIEW OF THE STATE

Geographically, Guam is the southernmost of the Marianas Islands and lies about 1,500 miles south of Japan, 1,500 miles east of the Philippines and more than 3,800 miles southwest of Hawaii. The largest island in the region, Guam is thirty-two miles long and four to twelve miles wide totaling two hundred twelve square miles.

Guam's family life and social events revolve primarily around religious activities. The significance of religious involvement differs tremendously from the U.S. mainland communities. Although the majority may not belong to the predominant faith as in the case of a community that is home to a multi-national populace, one cannot escape its enveloping influence. Religious involvement is all-inclusive; it covers every aspect of the human experience and the social sphere of life in Guam. Every village has its patron saint whose feast day is celebrated with an elaborate fiesta to which the whole island is invited.

Milestones of human development from birth to death are marked in religious practice. Religious influence is evident in every activity related to family living. These practices transcend the religious connotation. Families hold christening parties, weddings, novenas, funerals, and death anniversary rosaries, all flavored by Guam's unique blend of hospitality and celebration.

Guam is an ethnically diverse community of approximately 151,965 persons (1999 mid-year estimate, Office of Planning and Evaluation, Department of Public Health and Social Services). The population of Guam is relatively young, 34.5% being below the age of 15, compared to 21.4% of the U.S. population according to 1999 U.S. Bureau of Census estimates. Guam is divided into 22 villages and 19 election districts. Because many of the villages have small populations, for statistical purposes, the island is frequently divided into Northern, Central and Southern regions.

Northern Guam is the fastest growing region of the island, the population having increased by 32% between 1980 and 1990. Yigo and Dededo have rapidly expanding urban centers surrounded by suburban sections, underdeveloped land, and small family "ranches". Tamuning is largely urban and commercial with little remaining undeveloped land. Tamuning is also the site of Guam's only civilian hospital and many of the medical clinics of the island.

Much of Guam's Central region is suburban, although Guam's capital city of Hagåtña, which is largely commercial and has multi-family dwellings, lies in this region.

Southern Guam is the islands least developed and most traditional region, each small urban center being surrounded by extensive undeveloped or farming land.

The U.S. Census Bureau definition of rural and urban communities (communities having a population of 2,500 or more are considered urban) is not appropriate for Guam. Using this definition, Guam's capital city of Hagåtña, would be considered a rural community

while Inarajan, one of Guam's most traditional villages and an important agricultural area, would be considered urban.

Ethnicity of Guam by Region – 1999

	North	Central	South	Total
Asian-Pacific	61,458	45,914	24,153	131,526
Chamorro	23,567	30,365	20,726	74,658
Filipino	26,560	8,519	2,088	37,167
Federated States of Micronesia	2,186	3,180	687	6,053
Marshallese	67	161	11	239
Palauan	982	765	174	1921
Japanese	2,499	628	178	3,305
Other Asian	5,598	2,296	289	8,183
White	7,077	764	5,626	13,467
Black	890	98	707	1695
Others	3,087	1,188	1,003	5,278
Total	72,513	47,963	31,489	151,965

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The growth of the island population may attributed to the influx of people from the Federated States of Micronesia (FSM). As a result of the Compact of Free Association of 1985, between the United States Federal Government and the FSM and the Republic of the Marshall Islands and the Compact of Free Association of 1996 between the United States and the Republic of Belau (a.k.a. Palau), citizens from FSM, Palau and the Marshall Islands are allowed to freely enter the United States and its insular areas.

The addition of the Micronesian population is extremely critical to this grant request. The Micronesian immigrants are, for the most part, from areas with insufficient, if not completely nonexistent, health infrastructures. They are in low-paying, entry-level jobs, and often do not have health insurance. They do not qualify for Food Stamps, Public Assistance, or low-cost housing assistance, but they may qualify for some medical assistance programs available at the Department of Public Health and Social Services. Since many of the Micronesian do not have health insurance, they rely on the Emergency Room at the Guam Memorial Hospital Authority for urgent care or outpatient care needs, placing an undue burden on the hospital's operations. They also use many of the health programs at the Department of Public Health and Social Services. The Maternal and Child Health visits by clients of Micronesian ethnicity made up 18.22% of all visits, nearly three times their representation in the civilian population.

Guam's Department of Public Health and Social Services implements medical assistance programs, which strive to reach uninsured and underinsured women, infants, children, and youth through programs such as the Maternal and Child Health (MCH) Program, the Medicaid Program (MAP) and the Medically Indigent Program (MIP).

Guam Public Law 18-31 established the Medically Indigent Program (MIP). MIP is 100% locally funded. The program provides medical assistance to low-income families who

are residents of Guam. Lawmakers have been discussing making changes to the MIP. The program currently pays 100% of the costs associated with any medical treatment. However, lawmakers and public health officials are considering placing limits on the expenses paid by the MIP. In addition, officials are considering limiting the MIP to United States citizens, the same standard used by the Medicaid Program. Officials estimate that 20% of the citizens enrolled in the MIP are not U.S. citizens.

Public health officials also plan to cut Government of Guam funded welfare benefits by 30% in the year 2000. The Governor must approve this change. Currently, the government spends about \$26 million a year in welfare benefits.

The island of Guam applied for the Children's Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide similar benefits to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

In 1997, there were 44.0 Full Time Equivalent (FTE) civilian Primary Care physicians, and at least five (5) foreign medical graduates who are counted as a half FTE at most, practicing on Guam. This includes three (3) OB/GYN who did no deliveries; two (2) Pediatricians and two (2) Internists who closed their practices to new enrollment and five (5) physicians who were semi-retired. In the last two years, at least one civilian medical clinic has declared bankruptcy and reduced its operations; an HMO closed one of its operating sites; several physicians have moved to administration rather than medical practice, and others simply have not been in practice; and more specialty clinics have opened. This has reduced the overall number of primary care physicians on-island. Some physicians, due to age, have reduced the number of hours they see patients, both in clinic and in hospital. As the only civilian hospital is still unaccredited, many physicians send their patients off-island for both diagnostic and treatment procedures, reducing the number of hours they spend seeing patients in-hospital.

The health care industry is one of the fastest growing segments of the United States economy, yet we do not guarantee all citizens access to the basic health care services they need. Our health care delivery and welfare system, which never has adequately met the needs of the poor and at-risk populations, is being stretched beyond its capacity by the increasing number of families who have fallen into poverty and need the support of public programs. During the FY 2000 Budget Hearings of the agencies that service the health care and welfare needs of the people of Guam, the Department of Public Health and Social Services requested \$83,858,380; the Department of Mental Health and Substance Abuse requested \$6 million and the Guam Memorial Hospital Authority requested \$69,955,913; bringing the total funding request for the health and welfare

needs to \$159,814,294 which equates to \$1,144 per person for the civilian resident population.

The local hospital, Guam Memorial Hospital Authority (GMHA) has been facing a crisis situation over the past several months. Since October 1999, the Guam Legislature and the Governor's Office have been in disagreement over the terms of a hiring freeze. One interpretation, by the Attorney General of the law Public Law 25-72, "General Appropriation Act of 2000" which implemented a hiring freeze within the Government of Guam, is that no hiring of critically needed workers such as nurses and teachers can occur unless the Guam Legislature lifts the hiring freeze completely. The Guam Legislature has stated that the Governor's Office can hire essential workers without the Legislature lifting the Government of Guam wide hiring freeze.

On March 27, 2000, Senator Vicente Pangelinan sued the Governor and hospital officials to force them to hire critical hospital positions. On March 21, 2000, at a legislative oversight hearing, hospital board members and administrators told the legislative committee they can not hire due to the hiring freeze and the hospital is in a crisis situation. On March 22, 2000, Governor Gutierrez called the Guam Legislature into Emergency Session to consider a Bill to lift the hiring freeze. No action was taken. Superior Court Judge Katherine Maraman heard a request by Senator Pangelinan on April 17, 2000 to issue a Temporary Restraining Order that would lift the hiring freeze at the Guam Memorial Hospital Authority with respect to hiring nurses. On April 20th, the Temporary Restraining Order was issued, furthermore the date of May 1st was set to hear the case. On April 27th, the Governor asked the Supreme Court to stop the lawsuit. On May 24th, Speaker Antonio Unpingco, while Acting Governor, issued an Executive Order and ordered the hospital to hire the nurses and other critically needed positions. On May 26th, the members of the Guam Memorial Hospital Board, the Guam Medical Society, and the Nurses Association of Guam declared the hospital in a state of emergency. Furthermore, they issued an ultimatum to the hospital board to fill the nurse vacancies or resign. On the same day, the Pediatric Intensive Care was closed down due to the lack of qualified nurses to staff the Unit. On May 27, 2000, Acting Governor Madeleine Bordallo ordered the hiring of essential workers at Guam Memorial Hospital and of other crucial workers in other Government of Guam entities. However, for the hospital the lifting of the hiring freeze was not soon enough. On June 5th, the Surgical Unit of the hospital was closed due to the shifting of nurses to the Labor and Delivery Unit. The Labor and Delivery Unit had been staffed with three nurses to cover all the shifts.

On May 28, 2000, the Guam Memorial Hospital Authority Administrator announced the hospital had less than \$19,000 in the hospital's bank account. The hospital needs a average of \$5.4 million a month. The hospital had been collecting an average of \$4.3 million a month or \$1.1 million short of what is necessary. While the cash flow problem has become critical, the hospital is facing debts and obligations that must be paid. The Administrator has a bank payment of \$293,000 due on June 1 and has payroll of \$800,000 on June 9th. The Hospital Administrator stated that he would be seeking a Legislative Appropriation to meet the necessary obligations, but the Legislature has

stated that it has done its job in helping the hospital. The Legislature has worked on bills that would help the hospital's financial situation, including bills that reverse the \$8 million tax lien and other bills that would help fund the Medically Indigent Program (MIP) that pays the medical expenses of the needy.

Another change that Guam's health care industry is facing is the financial dispute between the Guam Memorial Health Plan (GMHP) and the Guam Memorial Hospital Authority (GMHA).

Early in September 1999, GMHA announced that the hospital would stop recognizing GMHP unless the health plan paid a delinquent bill. In late September, the health plan paid \$1 million towards the delinquent bill. In November, the check made toward the payment bounced.

In December 1999, the Guam Seventh-Day Adventist Clinic, where about 5,500 GMHP members receive health care, announced its decision to terminate its agreement with GMHP as a result of the health plan's failure to pay over \$1.6 million in bills.

Furthermore, the hospital announced it would stop honoring GMHP on December 22, 1999 if the health plan did not pay their \$4.5 million debt. On December 24, 1999, a temporary restraining order was issued against the hospital. The hospital would honor the health plan for 10 additional days. Later, the hospital board announced the GMHP's contract would not be renewed after its expiration on December 31, 1999. Furthermore, the hospital would be filing suit against GMHP.

On January 13, 2000, the Diagnostic Laboratory Services announced that it would stop accepting GMHP. Company officials stated that they have not been able to collect for services provided to GMHP patients.

GMHP lost most of its clients after clinics and the island's hospital stopped accepting the insurance, and the company planned to end its private sector coverage entirely, effective March 1, 2000.

Early in March, it was announced that another insurance plan would take over GMHP clients, thus ensuring the interests of the subscribers and the island hospital would be safeguarded.

The political structure of the island includes an elected governor and lieutenant governor, a unicameral legislature with 15 senators and a non-voting delegate in the U.S. Congress.

During the November 1998 elections for Governor of Guam, incumbent Governor Carl Gutierrez was elected as the Governor of Guam. Former Governor and opposing candidate Joseph Ada filed documents with the U.S. District Court opposing the election results stating Governor Gutierrez did not receive a majority of the votes cast as required by the island's Organic Act. On December 9, 1998, U.S. District Court Judge

John S. Unpingco issued an opinion calling for a runoff election. Governor Gutierrez appealed the decision to the Ninth U.S. District Court of Appeals and the Court upheld the decision of the U.S. District Court. On January 5, 1999, Governor Gutierrez and Lieutenant Governor Bordallo were sworn in for a new term. The Governor and Lieutenant Governor took their oaths of office based on certificates issued by the members of the Guam Election Commission that may have been signed in direct conflict with court orders. On July 1, 1999, Governor appealed the Ninth District's Court to the Supreme Court and former Governor Joseph Ada filed documents opposing the appeal. In October 1999, the Supreme Court announced it would hear the case and on December 6, 1999, the case was heard. On January 20, 2000, the Supreme Court issued an unanimous decision that Governor Gutierrez had won the November 1998 election for Governor.

The island of Guam continues to face financial crisis, as a result of the deficit growing and estimates predict that money will continue to be in short supply. The General Fund revenues dipped from a high of \$551 million in 1993 to \$469 million in 1999.

The main factor is the severe downturn caused by the decline in East Asian tourists and the Asian financial crisis. Guam Department of Labor's September 1999 Current Employment Report stated total employment had declined by 3,790 jobs. Guam's unemployment rate as of June 1999 (latest unemployment survey) was at 15.2%, meaning 11,060 people were looking for work. This figure was more than double Hawaii's unemployment rate and more than triple the national unemployment rate of 4.5%.

As reported by the U.S. District Court of Guam, bankruptcies have increased by 168% from 1994.

**Bankruptcies – Guam
1994-1999**

1994	1995	1996	1997	1998	1999
53	48	77	113	108	142

Source: U.S. District Court, Guam

Guam's tourist industry is the island's most important source of income. In recent years, it has been estimated that tourism-related dollars accounted for 60% of the island's gross island product, or the total value of goods and services produced in the island economy. Consumer and government purchases, private domestic and foreign investments, and the value of exports make up the gross island product.

The island hospitality industry has been the hardest hit during the downward cycle. Service sector jobs, which include hotels and lodging places, totaled 15,520 in December 1997. the number had decreased by 1,380 in mid-1999.

In addition, the number of building and construction permits issued during the third quarter of 1999 (most recent data available from Guam's Department of Commerce) totaled 452 and were valued at \$45.2 million, a decline of 50.2% from the prior year.

Furthermore, the military's on-going effort to cut costs bruised the island in 1999, with hundreds of jobs eliminated. Downsizing will hurt the island even more in the year 2000, when more than 1,000 Navy Civil Service workers lose their jobs to a private contractor.

In an August report prepared by the Guam Economic Development Authority, Guam residents in 1999 lost about \$68.41 million dollars in wages because of military reductions and the government lost about \$80.72 million dollars in taxes.

Most departments and services of the Executive Branch of the Government of Guam would have stopped operating on August 31, 1999 due to the fact the Legislature gave the Governor an 11 month budget. After August 31, 1999, all services, except emergency services and autonomous agencies, which are paid for from the General Fund would have ceased operations. Just hours prior to the shut down, the Legislature passed a budget bill barely adequate to prevent a shut down. The Governor signed this bill, which became Public Law 25-71, "An Act for the Continued Operation for the Executive Branch of the Government of Guam for the Month Ending September 1999 and For Restricting the Use of Government Monies."

On September 30, 1999, Governor Gutierrez signed Public Law 25-72, "General Appropriation Act of 2000." This law, also known as the Budget Law, provided incentives intended to save the depleting General Fund. These are:

1. **Quality Time Program:** This program allows full time employees to elect to work 20 or 30 hours a week at 50% or 75% of their full time salary respectively, both with full benefits.
2. **TGI Thursday Program:** This program establishes a voluntary 32-hour workweek, with full benefits.
3. **Voluntary Separation with Compensation Program:** This program allows any classified employee (who is not eligible for retirement) to voluntarily separate and receive a one-time lump sum payment equal to 50% of the employee's gross annual salary. The employee who voluntarily separates shall not be eligible for re-employment in the Government of Guam, inclusive of personal service contracts, for a period of no less than 3 years.
4. **Early Retirement Incentive Program:** This program allows any active member of the Government of Guam Retirement Fund who has a minimum of 20 years of creditable service to purchase an additional 5 years of creditable service and retire.

1.5 THE STATE TITLE V AGENCY

1.5.1 State Agency Capacity

1.5.1.1 Organizational Structure

The Guam Maternal and Child Health (MCH) and the Children with Special Health Care Needs (CSHCN) Programs were administered by the Bureau of Family Health and Nursing Services (BFHNS) until the end of calendar year 1999.

Beginning in December 1999, the administration and program coordination of the MCH and CSHCN Program were moved to the Office of Planning and Evaluation (OPE), a staff office of the Chief Public Health Office (CPHO). The CPHO falls under the Division of Public Health, within the Department of Public Health and Social Services (DPHSS). DPHSS is a line agency of the executive branch of the Government of Guam. DPHSS is responsible for administering the programs that are funded under Title V.

The move of MCH to the CPHO created and will continue to create a positive impact on systems development activities. The impact will include the following:

- A greater ability to have broad epidemiological support in gathering and analyzing health information.
- Closer ties to other important public health offices, including Primary Care; HIV/AIDS; Immunization; Injury Prevention; Chronic Disease and Dental Health.

The Title V State Agency will continue to address traditional issues such as infant mortality as well as contemporary issues around access to care for all maternal and child health populations. However, there will be a shift from categorical approaches addressing individual needs toward building local community capacity to support the family.

Significant pieces of legislation with an effect on the Maternal and Child Health Program:

- I. **Public Law 24-325:** “*Nurse and Other Health Care Professional Recruitment and Retention Incentives Act of 1998.*” This law mandates that “nurses and other healthcare professionals who have a national or Guam board certification, and are practicing in their area of certification, shall be entitled to a minimum certification pay differential, calculated at the rate of their regular wage plus fifteen percent (15%) to rectify an inequity in certification pay.”

The impact on the Maternal and Child health Program is on fiscal management. The program must take into consideration the 15% certification pay, overtime, holiday and weekend pay for the professional nurses under the grant when formulating the budget.

- II. **Public Law 24-239:** “*Guam Family Violence Act of 1998.*” This legislation addresses the dilemma of family violence on Guam by directing government resources towards controlling behavior, providing civil statutes and court procedures for handling family violence and by providing educational programs for the agencies involved in addressing the problem.

On July 13, 1999, the Director of Public Health and Social Services submitted to the Co-Chairperson of the Family Violence Task Force, the Family Violence Public Health Plan as mandated by PL 24-239.

The Public Health Plan will ensure referral and coordination activities between network entities and develop a comprehensive family violence public awareness program. Furthermore, a training program is being developed to provide information regarding family violence; indicators for screening potential victims; implementation of the Public Health Plan and the required protocols of referrals to the appropriate authorities for suspected victims of abuse and/or neglect.

- III. **Public Law 24-142:** “*The Educational Reform Act*” which was signed into law in February 1998, was found unconstitutional by the U.S. District Court. Under this law, the island was divided into four separate school districts, each with its own elected board. Furthermore, attendance districts would not necessarily coincide with voting districts. Therefore, some parents would not be able to run for the school board in their children’s school district.

During the March session of the 25th Guam Legislature, the Budget Bill was voted on. The Budget Bill included a rider, which deposed the current “Interim” school board and placed the Department of Education under the purview of the Governor.

In May 1999, the Governor appointed a 16 member Community Task Force on Education. The Task Force was given the following objectives:

- Reform the decision making process within the Department of Education.
- Develop a school-based organization focused on decentralization.
- Formulate action to make use of the ideas of the Education Goals 2000 Plan, which was developed in 1996.
-

On June 18, 1999, a “Draft Final report” was submitted to the Governor for action.

The impact on the Maternal and Child Health Program is uncertain. The Department of Education may make changes to the Special Education, HeadStart Program, and School Health Counseling Services that will influence Maternal and Child Health services.

- IV. The Governor of Guam signed **Executive Order 99-03:** “*Amending the Department of Administration Drug-Free Operating Procedures*” on February 18, 1999. The order revised the Department of Administration’s Drug-Free Workplace Operating Procedures Paragraph 24 “accident or unsafe practice testing” to include drug testing of employees involved in on-the-job accidents and unsafe practices involving death, bodily injury, or damage to property in excess of \$10,000 and employees involved in accidents while transporting a member of the public.

The Executive order impacts the Maternal and Child Health Program personnel since they are governed by the Department of Administration’s Rules and Regulations, which includes the Drug-Free Workplace Operating Procedures.

- V. On August 30, 1999, the Governor signed **Public Law 25-71**: “*An Act for the Continued Operation for the Executive Branch of the Government of Guam for the Month Ending September 1999 and For Restricting the Use of Government Monies.*”

The Public Law funded payroll for the month of September. The Public Law placed a prohibition on the usage of cellular phones, the lease and use of Government vehicles by Directors and Deputy Directors of the Government of Guam, the payment of fees and stipends for members of Boards and Commissions and the use of twenty-four (24) hour vehicles.

Furthermore, the Public Law placed a moratorium on travel, with the exception of the following:

- Court ordered travel;
- Travel required to transport prisoners;
- Travel for purposes of medical treatment; and
- Travel paid for entirely by Federal funds inclusive of any per diem and ground transportation costs.

- VI. On September 30, 1999, Governor Gutierrez signed **Public Law 25-72**: “*General Appropriation Act of 2000.*” This law, also known as the Budget Law, provided incentives intended to save the depleting General Fund. These are:

1. **Quality Time Program**: This program allows full time employees to elect to work 20 or 30 hours a week at 50% or 75% of their full time salary respectively, both with full benefits.
2. **TGI Thursday Program**: This program establishes a voluntary 32-hour workweek, with full benefits.
3. **Voluntary Separation with Compensation Program**: This program allows any classified employee (who is not eligible for retirement) to voluntarily separate and receive a one-time lump sum payment equal to 50% of the employee’s gross annual salary. The employee who voluntarily separates shall not be eligible for re-employment in the Government of Guam, inclusive of personal service contracts, for a period of no less than 3 years.
4. **Early Retirement Incentive Program**: This program allows any active member of the Government of Guam Retirement Fund who has a minimum of 20 years of creditable service to purchase an additional 5 years of creditable service and retire.

The effect of Public law 25-72 on the Maternal and Child Health Program is the following:

- . The realignment of MCH Program staff to the Chief Public Health Office.
- . Communicable Disease Clinics serviced an average of 30 patients per clinic. The number of patients has been reduced to 15 patients per clinic.

- . With the retirement of a Community Health Nurse Supervisor I, who was also a Nurse Practitioner, four clinics per month have been canceled. This means that approximately 100 patients per month will not be able to be seen.
- . The earliest prenatal exam is three months away. Currently, there are fifty (50) patients on the waiting list for prenatal services. Each month, approximately, forty-four (44) new patients are added to the waiting list.
- . Friday Immunization Clinics have been canceled, affecting approximately 80 patients per month.
- . The number of patients seen in the Postpartum/Newborn clinics has been reduced from 48 to 24 due to the transfer of three (3) District Nurses to the clinics.

1.5.1.2 Program Capacity

The mission of the Guam Maternal and Child Health (MCH) Program is to promote the health and well being of infants, children, youth, potential parents and parents.

The Title V MCH program has direct responsibility for, or manages, primary and preventive health care for uninsured and underinsured inhabitants of Guam.

Public health nurses from the Department of Public Health and Social Services assist the MCH population in two primary ways, through care coordination services and through nursing intervention. Care coordination services include referral to and on-going communication with other disciplines for additional assessment and intervention of particular concerns. Public health nurses provide knowledge about community resources, roles and responsibilities of providers and the strengths and needs of children, families, and communities.

Public health nurses provide care at a primary level of prevention. Nursing activities include screening and assessment of client and community needs. Nursing screening and assessment leads to identification of nursing diagnoses and to a plan of care with identified nursing intervention. The plan is then implemented to promote a client or community's health.

Preventive and primary care services for pregnant women, mothers, and infants:

The Title V Program has a significant role in providing the framework for the way health care services are delivered to vulnerable infants, children, youth, and women on Guam.

The services that are provided to women who meet the income criteria include: screening to determine high-risk pregnancy; routine prenatal laboratory test performed at the Public Health laboratory; diagnostic procedures; X-rays and laboratory tests ordered by the Clinician and authorized by MCH; vitamins and iron supplements for pregnant women; social services provided by Medical Social Services; prenatal and postpartum care; referral to the Special Supplemental Nutrition Program for Women,

Infants and Children (WIC); referral for nutrition counseling; health education classes on Abstinence and Family Planning for adults and adolescents.

In addition, clients with acute illnesses or in need of medical procedures beyond the capabilities of the MCH Clinics are referred to Medical Social Services for medical assistance and then to the Bureau of Primary Care Services for assessment and treatment.

Preventive and Primary Care Services for Children:

The Title V Program has maintained its responsibility for providing or supporting direct health care services to children who are not otherwise served by the health system.

Child Health Services include the following: Well Baby and Child clinical services such as Community Health Nurse home visit services; immunizations; screening, referral and case management for Children with Special Health Care Needs (CSHCN); referral for developmental, audiological and/or speech evaluations; referral to the Special Supplemental Nutrition Program for Women, Infants and Children (WIC); referral for nutrition counseling; health education classes on Abstinence and Family Planning for adolescents and referral to Dental Health Services.

Services for Children with Special Health Care Needs (CSHCN):

Children and adolescents with Special Health Care Needs are defined as “those who have or are at increased risk for chronic, physical, developmental, behavioral or emotional conditions and who require health and related services of a type or amount beyond that required by children generally.” (McPherson, Arango, Fox, Lauver, McManus, Newacheck, Perrin, Shonkoff and Strickland, 1998).

Health care for the island’s CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), the Medicaid Program (MAP) and through local health maintenance organizations (HMO’s) and private clinics under self-pay. Public health nursing personnel conduct case findings and make referrals to the MIP and MAP and follow up to ensure that these clients are visited. The MIP and MAP are responsible for reimbursement to the providers for the services rendered.

The care provided to CSHCN include diagnostic evaluations and appropriate care to children with or at-risk for chronic and/or disabling conditions; care management; referrals to appropriate agencies for needed services and Community Health Nurse home visit services; immunizations; screening referral for developmental, audiological and/or speech evaluations; referral to the Special Supplemental Nutrition Program for Women, Infants and Children (WIC); referral for nutrition counseling; health education classes on Abstinence and Family Planning for adolescents and referral to Dental Health Services.

The goal of the CSHCN component of the MCH Program is that all infants, children and youth will live in a safe, nurturing environment and will have resources available to assist them in achieving and/or maintaining optimum health and development. The CSHCN component is designed to assure that community members are active participants in the planning and provision of community-based services for children with special needs and their families.

The island does not have a Supplemental Security Income (SSI) Program to provide rehabilitation services to individuals under the age of sixteen with disabilities. Moreover, the Medicaid (MAP) or local Medically Indigent Program (MIP) does not have any provisions for these services. However, if such services are needed, individuals and families may seek assistance through non-profit organizations and the Department of Integrated Services for Individuals with Disabilities (DISID).

1.5.1.3 Other Capacity

The Office of Planning and Evaluation (OPE) administers the Maternal and Child Health (MCH) Program. OPE is a staff office of the Chief Public Health Office (CPHO). The OPE provides and/or assists in the planning, developing, coordination, evaluation and implementation of federally funded and locally mandated programs such as: the Office of Vital Statistics; the Behavioral Risk Factor Surveillance System (BRFSS); the Family Planning (FP) Project; the State System Development Initiative (SSDI) Project known as the Health Improvement Project (HIP); and the Abstinence Only Education (AOE) Program.

The Bureau of Family Health and Nursing Services administers locally funded programs that include Public Health clinics; Home Care Program; Community Assurance and Improvement; and Staff Development. Although administratively separate from the MCH Program, the Bureau continues to focus its scope and objectives on the following:

1. Provision of effective programs for disease prevention and control (i.e., mass immunization, immunization outreach clinics, hypertension, diabetes and cholesterol screening, etc.).
2. Provision of effective patient education activities to develop community awareness of health risk factors and to achieve individual health modification to minimize such risks.
3. Provision of effective health programs directed at servicing women of childbearing-age and children, including children with special health care needs.
4. Provision of linkages for clients between government agencies and/or public institutions to address their health needs and concerns.

The Medical Director of the Department of Public Health and Social Services provides in-kind assistance to the MCH Program. The Medical Director provides clinical services as a pediatrician and provides information for grants, policies and procedures.

In addition to the input by the Medical Director, input is sought from the Medical Advisor on women and child health issues. The Medical Advisor's duties and responsibilities include: review of patient charts to determine compliance with established protocols and medical standards; professional support for the expanded roles and practices of professional nursing personnel; review of cases; provide technical assistance in the development of MCH policies; review of the medical components of the MCH Program and conduct training for nurses and staff.

The Title V Program supports twenty personnel with a vacancy rate of 40% (8 vacancies). Personnel within the Office of the Chief Public Health Officer provide in-kind services in the planning, evaluation, data collection and analysis of the program.

Furthermore, within the Division of Public Health, several parents of Children with Special Health Care Needs (CSHCN) have reviewed the grant application. There is no special staff position as a family consultant for CSHCN. The parents met with program staff to address problems, barriers and discusses recommendation and planning strategies to reach the goals and objectives of the CSHCN component of the MCH Program.

1.5.2 State Agency Coordination:

The MCH Program participates in a network of coalitions, advisory groups, and planning efforts throughout the island. The majority of these planning efforts include input between different departments of the government as well as between various non-profit organizations. Examples of public private collaboration are:

- . *Healthy Mothers Healthy Babies (HMHB)*: This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.
- . *Newborn Metabolic Screening Task Force*: This is a collaborative effort between MCH, private providers, insurance companies, and the local hospital. The MCH Program has taken the lead to implement a tracking system for the Newborn Metabolic Screening Program. Guam Memorial Hospital Authority (GMHA) routinely conducts newborn metabolic screens for all neonates born at the GMHA. However, there was no mechanism in place for tracking babies with abnormal metabolic screens or any indication whether a repeat test or early intervention was done to the client. In 1998, MCH developed a disposition form for tracking abnormal screens done at GMHA and to ensure that the physicians (private and public) do a repeat test as scheduled, confirm a diagnosis, and provide early intervention and treatment, as necessary.

- . *Guam Interagency Leadership Consortium (GILC)*: GILC addresses the problems and concerns of individuals with special needs such as the fragmentation and duplication of services, or coordinated funding systems, the unavailability of community and State resources, and the lack of comprehensive health care coverage and cultural diversity. The MCH Program has assumed the leadership role for the consortium. The GILC consists of government, private and community-based organizations and consumers.
- . *Guam Interagency Coordinating Council (GICC)*: GICC members are appointed by the Governor to advise and assist the Guam Early Intervention System and other agencies regarding system integration. The GICC is comprised of 19 representatives from various public and private agencies, as well as parents of children with special needs.
- . *Emergency Medical Services for Children (EMSC)*: The MCH Program is actively involved in the formation of the EMSC Needs Assessment. The involvement of MCH is that 1) core public health functions are addressed; 2) there is responsiveness to emerging trends and issues; and 3) availability of services that are accessible and family-centered.
- . *Community-Based Nursing Program*: The program works with local village Mayors and the media to publicize when and where the Community-Based Clinics will be held each month. The program provides public information and education, immunization, abstinence education to teens and comprehensive reproductive services to prevent HIV infection, sexually transmitted disease, and ways to prevent unwanted pregnancies. Other services include Blood Pressure, Blood Glucose, Cholesterol screening and pregnancy testing.
- . *Immunization Services*: The MCH Program collaborates extensively with the Guam Immunization Program, which provides vaccines, disease surveillance, assessment of immunization levels, outbreak control measures, monitoring of vaccine usage and evaluation of vaccine reaction. This is all in an effort to increase the immunity level of children on Guam.
- . *Shriners Clinics*: This is a collaborative effort between public health providers, Medical Social Services of DPHSS, Medical Records of DPHSS, and the Children with Special Health Care Needs component of MCH. Bi-annual clinics are held for children who need further evaluation and/or surgery and those who require fitting for assistive devices. Information on the availability of the clinics is disseminated through print and electronic media.
- . *Domestic Violence Task Force*: This Task Force was created as an island wide effort to reduce the incidence of family and interpersonal violence through public and professional education and outreach, enhance victim services, including a priority focus on children witnessing violence, enhance batterers intervention

initiatives and the development of comprehensive protocols for professional entities.

- . *I Familia-ta Fine'nena (IFF)*: "Families First" Coalition is composed of community-based organizations, parents and other community representatives whose mission is to advocate to facilitate the integration of community services for families and children to work toward the elimination of gaps and overlaps in services, and to provide a "Families First" perspective in the community and in agencies that deal with families and children.
- . *Reach Out Organization*: This is a school-based organization, which is dedicated toward spreading awareness of issues facing youth on Guam. The organization's goal is to empower individuals and families of Guam's communities through education to gain knowledge regarding youth issues.
- . *Guam Diabetes Advisory Body (GDAB)*: GDAB was formed in 1995. It serves as the main focal point for collaboration between stakeholders in the field of diabetes care and management, and evaluation of strategies to help assist in the designing, implementation and evaluation of strategies to help educate the public in the prevention and control of diabetes.
- . *Coral Life Foundation*: The Coral Life Foundation is a community-based organization that is committed to making a positive difference in the lives of individuals affected by HIV/AIDS. Through the collaborative efforts of volunteers, public and private agencies, and corporate partnerships, the mission is to prevent HIV/AIDS infection, to provide education, and to advocate for the human rights of all individuals living on Guam.

2.4 PROGRESS ON ANNUAL PERFORMANCE MEASURES

DIRECT HEALTH CARE:

National Performance Measures 01 and 02 address direct health care services for Children with Special Health Care Needs. State Performance Measure 04 addresses 1) preventive and primary care services for pregnant women, mothers and infants; and 2) preventive and primary care services for children.

Performance Measure #01

The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.

The island of Guam was excluded from reporting on this measure. The island does not have a Supplemental Security Income (SSI) Program to provide rehabilitation services to individuals under the age of sixteen with disabilities. Moreover, the Medicaid (MAP) and local Medically Indigent Program (MIP) do not have any provisions for these services.

Performance Measure #02

The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty or subspecialty services, including care coordination not otherwise accessible or affordable to its clients.

FY ' 98 Performance Objective: 4

FY ' 99 Performance Objective: 5

Status: Not attained

With regard to Measure #02, the Guam MCH Program currently provides or pays for the following:

- Medical and surgical subspecialty services
- Speech, hearing and language services
- Home health care
- Care coordination

Early in fiscal year 1999, the MCH Program realized that Children with Special Health Care Needs are at increased risk for a variety of nutrition and feeding problems. In addition, many of these families are at risk for inadequate information on nutrition and feeding. Therefore, the MCH Program planned to incorporate specialized nutrition into

services provided. However, this was not accomplished due to the resignation of the Nutritionist.

In 1998, there were 803 Children with Special Health Care Needs seen via home nursing visits and routine health maintenance clinical visits. However, there were 333 children seen in 1999. This was a decrease of 58.5%.

Medical Social Services (MSS) of the Department of Public Health and Social Services (DPHSS) provides social work for patients and/or families to assist them in resolving their social and emotional problems related to health care, illness, birth defects, and/or rehabilitation in order to promote optimal social functioning.

MSS has experienced a rise of 88% in counseling contacts for Children with Special Health Care Needs, from 406 contacts in the 1st quarter of 1999 to 764 counseling contacts in the last quarter.

The MCH Program continues to coordinate the specialty Shriners Clinics for children 0-21 years old to receive free examination and evaluations.

The Shriners Clinic team from Hawaii continues to provide bi-annual orthopedic clinics on Guam. This is a collaborative effort between private health providers, MSS, Medical Records of DPHSS, and the CSHCN component of MCH. Clinics are held for children who may need further evaluation and/or surgery and those who require fitting for assistive devices. Information on the availability of the clinics is disseminated through print and electronic media.

There were 12 Shriners Clinics in which 392 children were seen in 1998. In 1999, the Shriners also held 12 clinics in which 359 children were seen. This was a decrease of 8.4%.

Furthermore, as a result of the Shriners Clinics, 40 patients were put onto a waiting list for further evaluation and possible admission to the Shriners Hospital in Honolulu, Hawaii, while eight patients were referred for measurement of orthopedic appliances and equipment.

Region IX Hemophilia Program and the Hemophilia Foundation of Hawaii sponsored eight participants (6 from Guam and 2 from the Commonwealth of the Northern Marianas) to attend the Annual Hemophilia Summer Camp. Because of their attendance, the participants became more knowledgeable about their disorder.

In September 1999, the Department of Public Health and Social Services hosted the Universal Data Collection Study and Hemophilia Clinic. There were 50 patients seen during the 3-day clinic. This was the second year of a 5-year study, a project spearheaded by the Centers for Disease Control. Participants in the study receive free testing for blood borne viruses, which they may have contracted as a result of using factor products. Based on the results received in late 1999, nine hemophilia patients

were found to have contracted Hepatitis C. This prompted the Hemophilia Program to conduct an in-service for the patients and families regarding Hepatitis C.

There are 56 confirmed hemophilia patients on the island. Presently, there is a shortage of factor on Guam. Pharmacies will not order factor because of the lack of payment. Most of the hemophilia clients are covered under the Medicaid or local Medically Indigent Program and payments have been delayed.

Local insurance companies do not cover the cost of factor, except for Government of Guam employees covered by the companies' plans. This added benefit was included after the Hemophilia/Bleeding Disorders Foundation lobbied for it to be included in 1998. A bill introduced by the Guam Legislature would broaden the insurance coverage to include factor for private sector employees. This bill has had a public hearing, but the final bill is still pending. A year's supply of factor per patient runs roughly \$68,000.

The Department of Education, the lead agency for the Guam Early Intervention System (GEIS) supports the full inclusion of infants and toddlers with or "at risk" for developmental delays and their families. The Guam Early Intervention System is comprised of two units, both located at the University of Guam, which provide services and support for infants and toddlers and their families eligible for early intervention services under Part C of the Individuals with Disabilities Education Act (IDEA). These are the Diagnostic Unit and the Intervention Unit.

Diagnostic Unit:

Pediatric Evaluation and Developmental Services (PEDS) provides identification, referral, screening, evaluation, assessment and intervention services for children from birth to age three. Developmental areas evaluated and assessed by PEDS staff include hearing, gross and fine motor, speech and language and cognitive abilities.

The Infant Diagnostic Team (IDT) provides immediate intervention services to newborns at the Guam Memorial Hospital's Neonatal Intensive Care Unit (NICU) or the intermediate care nursery. The IDT includes a registered nurse, as well as a developmental specialist to ensure that newborns receive services as soon as possible.

The Rapid Response Team (RRT), in addition to the regular PEDS Team, is a diagnostic team that has been working to provide evaluation and assessment services outside the regular normal workweek. The team is comprised of a social worker, speech pathologist, occupational therapist, physical therapist, and developmental specialist who are available as needed to accommodate families after hours and on weekends.

Intervention Unit:

The Infant/Toddler Program is comprised of nurses, social workers, teachers, paraprofessional and child development specialists, that provide family support and intervention services for children who are eligible for GEIS services.

The Community Integrated Play Groups are located in the community centers and are facilitated by GEIS Play group teacher and paraprofessionals. Play group families' meet four times a week and include not only families of children with developmental delays and their siblings, but also families of "typical" children from within the community.

Child Find is an aggressive community outreach to screen newborns through five year old in the areas of health, hearing, vision, speech and language, cognitive and social development.

State Performance Measure #04

***The percent of Chlamydia
Trachomatis infections in women
under the age of 25.***

FY ' 98 Performance Objective: 0.69%

FY ' 99 Performance Objective: 0.68%

Status: Attained

In 1999, there were 224 cases of Chlamydia reported in females under the age of 25. There were 36,088 females under the age of 25 on Guam in 1999, resulting in an incidence rate of .63.

**Reported Chlamydia Cases
1997-1999**

	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60+	Unk	Total
Chlamydia '97	0	0	0	4	107	130	62	59	1	2	0	30	395
Chlamydia '98	0	0	1	6	115	139	100	55	6	0	0	10	432
Chlamydia '99	3	0	1	6	102	160	91	70	18	5	1	11	468

Source: Department of Public Health & Social Services, Office of Epidemiology and Research

Chlamydia is the most common sexually transmitted disease (STD) in the United States and Guam. According to the 1997 CDC Sexually Transmitted Disease Surveillance Report, of the reported cases of Chlamydia by state/area, ranked according to rates, Guam ranked number nine in the United States and outlying areas.

Overall, Chlamydia incidence rose by 26% from 121.1 cases per 100,000 population in early 1998 to 152.9 in early 1999. By sex, females had a lower increase than males, but their incidence rates were consistently much higher than those for males. In early 1998, males had a incidence rate for Chlamydia of 24.4 cases per 100,000 males while

females were at 221.0 cases per 100,000 females. In early 1999, males had increased their rate by 35%, to 32.9 cases per 100,000; females had increased by 29% to 285.1 cases per 100,000.

Nearly all ethnic groups had increased rates of Chlamydia, with only Marshallese and Chinese having no cases in 1999. The lowest percentage increase was in the Chamorro group, which went from 114.7 cases per 100,000 to 119.4, while the highest incidence was in the Black population, which increased by 342%. The Black population is very small on Guam, so this increase is more a function of these numbers, rather than an epidemic of Chlamydia.

In 1998, 1,033 individuals were seen in 225 STD clinics. In 1999, there were 219 STD clinics where 1,136 individuals were seen. This represents an increase of 9.97% in individuals seen.

Furthermore, in 1998, there were 438 adolescents seen in the STD clinics. In 1999, 382 youth visited the STD clinics. Overall, there was a decrease of 12.78% in adolescents seen.

Efforts to educate adolescents on the signs and symptoms of STD's increased in 1999 by 11.82% (1,324) over 1998 where 1,184 adolescents received education on the signs and symptoms of STD's.

The Guam Family Planning (FP) Project conducted a joint presentation on teen issues with the Bureau of Communicable Disease Control STD/HIV Program at the University of Guam. The presentation was given to 13 students enrolled in a social work class. The issues that were discussed were 1) the effects of STD/HIV/AIDS within the community; 2) teen pregnancies; and 3) introduction of community services available on the island.

In addition, the Family Planning Project participated in the Department of Education sponsored "Education for Life" seminar. The purpose of the seminar was to provide a venue for students, parents, educators and the community to jointly address concerns, issues and solutions/ideas to prevent the spread of HIV and other STD's on Guam. Over 200 individuals attended this educational intervention.

The MCH Program conducts risk assessments on all prenatal clients during the initial interview. There were 2,018 prenatal clients screened in the clinics. Of this number, 29.28% (591) were referred to CDC for counseling and 38.30% (773) received education on HIV.

ENABLING SERVICES:

National Performance Measure 03 addresses enabling services for Children with Special Health Care Needs. State Performance Measure 01 addresses enabling services for 1) preventive and primary care services for pregnant women, mothers and infants and 2) preventive and primary care services for children.

Performance Measure #03

The percent of Children with Special Health Care Needs (CSHCN) in the State who have a “medical/health home”.

FY '98 Performance Objective: 62%

FY '99 Performance Objective: 63%

Status: Not attained

Of the 914 active cases enrolled in the State CSHCN Program, 562 (61.48%) had a source of insurance for primary and specialty care. This was a rise of 2.74% from 1998, where 547 (60.30%) had a source of insurance.

Insurance Status CSHCN Program 1998-1999

	MIP	MAP	Private	None	Total
0-3 yr old '98	35	33	25	93	186
0-3 yr old '99	34	37	32	86	189
4-21 yr old '98	75	140	239	267	721
4-21 yr old '99	68	153	238	266	725

Source: Department of Public Health & Social Services, Maternal and Child Health Program

The Maternal and Child Health Bureau uses the definition of a “medical/health home” as: “medical care of infants, children and adolescents that is accessible, continuous, comprehensive, family-centered, coordinated and compassionate. It should be delivered or directed by well-trained physicians who are able to manage or facilitate essentially all aspects of care.”

Health care for the island’s CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), the Medicaid Program (MAP) and through local health maintenance organizations (HMO’s) and private clinics under self-pay. Public health nursing personnel conduct case findings and make appropriate referrals to the MIP and MAP.

The goal of the CSHCN component is to ensure access to quality comprehensive, community-based health care systems for all infants, children, and adolescents with special health care needs.

State Performance Measure #01

The percent of adolescents aged 12 through 17 with substance use/abuse.

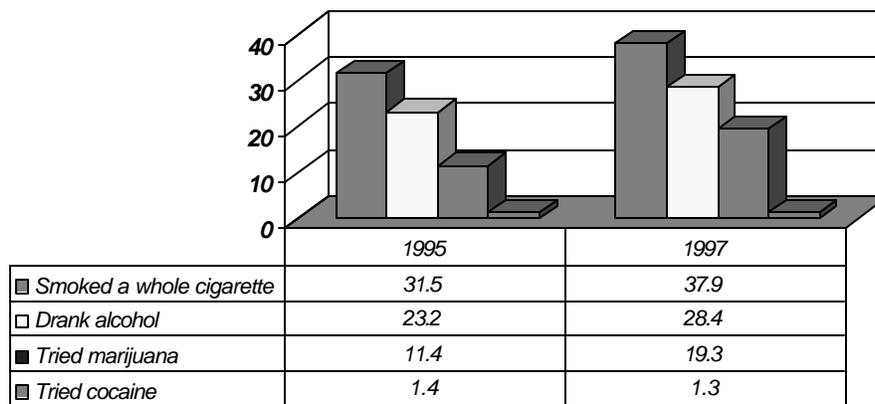
FY ' 98 Performance Objective: 0.4%

FY ' 99 Performance Objective: 0.3%

Status: Not attained

Drug use among young people appears to develop in predictable stages, consistent with the “gateway” concept. (Kandel, D.B., 1975). This concept suggests that experimentation with drugs usually begins with cigarettes, alcohol or marijuana, and then progresses to other drugs. This is particularly important because the use of “gateway” drugs appears to predict both greater involvement with alcohol and with other drugs and the less likelihood of recovery. The use of cigarettes, alcohol, and marijuana is correlated with other health problems including adolescent suicide, sexually transmitted diseases, and problem pregnancy. As illustrated below, the percentage of high school students on Guam who start drug related behaviors before the age of 13 is on the rise.

Percentage of High School students who reported initiating drug-related behaviors before age 13



Source: Youth Risk Behavior Survey 1998, CDC

In December 1998, the University of Guam, College of Agriculture and Life Sciences, Community Resource Development issued a report entitled “1999 Safe and Drug Free Schools and Communities Study of Youth Risk Behaviors.” This report was funded by the Safe Drug Free Schools and Communities Act Grant.

The study used questionnaires developed by the U.S. Centers for Disease Control for the National Youth Risk Behavior Survey. Data was collected from samples of both high school and middle school students during the April-May term of 1999. At the time, there were eighteen (18) high schools, both public and private, with an estimated enrollment of 11,126 students and twenty three (23) schools with grade levels 6 to 8, both public and private, with an estimated total enrollment of 9,300.

All schools were asked to participate in the study. From the schools contacted and presented with the information packet, only 8 middle schools and 4 high schools agreed to participate. Schools agreeing to participate enrolled 9,499 high school students (85% of the island's grand total) and 8,266 middle school students (89% of the island's grand total). Class selection at each school was designed for contacting about 900 middle and 900 high school students. Cleaned data resulted in a data set of 643 middle school and 590 high school students.

Listed are some of the conclusions the study found:

1. Marijuana has been tried by 13% of Guam middle school students.
2. Among high school students, 51% have tried marijuana.
3. The same proportion of middle and high school students (15%) have sniffed glue, pr breathed the contents of spray cans, or inhaled chemical products to get high.
4. Methamphetamine ("Ice") is the one drug of choice on Guam that can be said to be at an epidemic level. When looking at high school students – 13% have used "ice", which equates to – in any classroom of 30 students, 3 to 4 are experimenting with the drug.
5. Half (50%) of middle school students have tried smoking cigarettes, and one-out-of-ten are smoking one or more cigarettes every day.
6. Over 79% of high school students have tried smoking cigarettes, which is higher than the national average of all U.S. high school youth, which found 70% having smoked tobacco (CDC, 1998).
7. More than 41% of middle school youth have tried alcohol, and of those, 24% had their first drink at age 8 or younger.
8. Three-fourths (76%) of high school students have tried alcohol, and just under half (44%) are current drinkers.

The MCH Program does not provide direct drug and alcohol treatment for adolescents with substance abuse difficulties. MCH, through collaborative agreements with other agencies, including the Department of Mental Health and Substance Abuse, can provide community-based outreach activities, health evaluations and prevention of disease case findings, health education and referrals for evaluation and treatment.

In 1999, just prior to the survey data collection, the Ninth Annual Youth for Youth Conference was held for 450 youth from the region (the Commonwealth of the Northern Marianas, the Marshall Islands, the Federated States of Micronesia and the Republic of Belau). Each year since 1990, this conference has been planned by youth, who develop leadership and social skills as they work toward planning the conference under the auspices of the Department of Mental Health and Substance Abuse. The Youth for Youth organization encourages youth participation in other related community or school events.

The Drug Abuse Resistance Education (DARE) Program is carried out by the Guam Police Department's Training and Staff Development Section, and is based on the

nationally developed curriculum. This program has been focused and almost exclusively conducted within Guam's elementary schools.

Inafa' Maolek is a non-government, community-based, non-profit organization which promotes peace in the community. Inafa' Maolek was initiated by a local attorney and involves a network of volunteers which has been involving and training youth in peer mediation, date rape prevention and health education "community theatre" performances.

It was found that 23% of the high school students surveyed reported participation in a Youth for Youth event, 47% had experienced a DARE presentation and 16% had witnessed an Inafa' Maolek presentation.

Sanctuary Incorporated is a non-profit community-based organization that has been on the island of Guam for 29 years. The purpose of the organization is to provide community-based services to abused, homeless, runaway and troubled youth. Over the past few years, the focus of Sanctuary has changed to providing prevention techniques and education to youth.

One of the programs operated through Sanctuary is the Drug and Alcohol Prevention Program (DAPP). The program provides a variety of services that include conducting educational workshops and presentations for middle and high school students, youth and families in low-cost housing areas, clients in Sanctuary residential programs and parents in the Parental Assistance Programs. Staff of Sanctuary also provides drug and alcohol screening and assessments as well as referrals to other agencies.

Sanctuary Statistical Report 1998 & 1999

	1998		1999	
	Total	Percent	Total	Percent
Total Caseload				
Male	161	48%	162	45%
Female	171	52%	200	55%
Age Breakdown				
11 or less	3	.9%	5	1%
12	16	4.6%	26	7%
13	37	11%	46	13%
14	44	13%	64	18%
15	65	19%	44	12%
16	85	25%	66	18%
17	72	21%	78	22%
18+	20	6%	36	10%
Breakdown of Problem Areas*				
Runaway	52	16%	54	15%
Family Problems	303	93%	244	67%
Homeless	37	11%	77	21%
Beyond Control	35	10%	94	26%
Physical Abuse	32	9%	68	19%

Sexual Abuse	47	14%	47	13%
Emotional Abuse	53	16%	19	5%
School Problems	79	24%	54	15%
Neglect	16	4%	14	4%
Drugs & Alcohol	18	5%	48	13%
Suicide Attempts	18	5%	8	2%
Hospitalized for Suicide Attempt	4	1%	16	4%

Source: Sanctuary Inc. Annual Reports, 1998 & 1999 *Client may have one or more problem areas

The program facilitates a Youth Group, which meets once a week. The group involves youth that have issues concerning drugs and/or alcohol. The Youth Group is a mandatory part of the Department of Mental Health and Substance Abuse Youth Program. Clients are required to participate in the group for twelve weeks. Furthermore, the “meetings” are open to the public. The overall goal of the group is to empower and encourage youth to work from their strengths and to develop the appropriate skills that promote and support healthy lifestyle choices.

The Superior Court of Guam has implemented an adolescent drug and alcohol treatment program to address the increase in juvenile drug offenders and the increase in juveniles ordered by the court to drug treatment.

**Superior Court of Guam
Adolescent Drug Treatment Activities**

	1997	1998
Number of participants	75	87
Status:		
Released	75	81
Confined	0	6
Age:		
13-14	15	19
15	16	24
16	18	11
17	18	26
18-20	8	7
Type of Offense:		
Felony	10	10
Misdemeanor	17	25
Status Offense	22	22
Multiple Offense	26	29
Type of Substance:		
THC *	30	45
Alcohol	28	42
Inhalants	6	26
Methamphetamine	11	30

Source: Superior Court of Guam *Tetrahydrocannabinol (active ingredient in Marijuana)

According to the Department of Education, drug incidents are referred to the Guam Police Department's Juvenile Division when they involve possession of a controlled substance. Interviews with personnel at the Pupil Personnel Services Division provided information that the vast majority of recreational drug use among youth occurs off-campus. Although there are drug incidences, and tobacco use is widespread, most students know the disciplinary action and tend to use/misuse substance off-campus.

**School Drug Offenses
1994-1998**

	1994	1995	1996	1997	1998
Middle School Grades 6-8	15	6	8	9	2
High School Grades 9-12	20	4	13	27	15

Source: Department of Public Safety, Uniform Crime Report 1998

POPULATION BASED SERVICES:

National Performance Measures 04, 05, 06, 07, 08, 09 and 10 and State Performance Measures 08, 02 and 05 address population based services for the following population groups:

Primary and Preventive Care for Pregnant Women, Mothers and Infants:

Performance Measure #06

The rate of birth (per 1,000) for teenagers aged 15 through 17 years.

FY ' 98 Performance Objective: 49

FY ' 99 Performance Objective: 48

Status: Attained

In 1998, there were 518 births to teen mothers. There were 12,056 females on the island of Guam between the ages of 10-19. Thus, the rate of birth for teenagers calculates to 42.97 per 1,000.

**Live Births – Guam
1994 – 1998**

	1994	1995	1996	1997	1998
Below the age of 15	15	6	4	8	7
15 – 19	609	596	526	481	511
Total Teen Births	624	602	530	489	518
Total Live Births	4,427	4,190	4,265	4,318	4,322

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

In 1999, 361 adolescent females received prenatal care services through clinics and home visits. This was a decrease of 57.38% from 1998 data where 847 adolescent females received prenatal care.

In addition, there were 270 HCG tests done for adolescent females. This was also a decrease of 25.76% over 1998 data where 379 HCG test were performed. However, 735 adolescent females were referred for family planning services and counseling. This was a substantial increase of 31.25% over 1998 numbers, In 1998, 560 adolescents were referred for counseling and family planning services.

The MCH Program continues to collaborate with the Guam Family Planning Project to increase the accessibility and availability of pregnancy testing in the public middle and high schools. In 1999, there were 220 test kits distributed to School Health Counselors via the public school system. One hundred forty three (143) females obtained a pregnancy test via the school system. Of the 143 females, 34 (23.77%) tested positive, while 109 (76.22%) tested negative. Teens with a negative pregnancy test were referred to either Public Health clinics or a private health care provider for examination and possible issuance of a birth control method. Seventy-four percent (74%) were referred to a private health care provider and twenty six percent (26%) to Public Health.

The MCH program continues to educate teens on Guam to postpone sexual relations until they are prepared to raise a family. The focus of the education is on teaching the social, health, financial and psychological benefits gained by abstaining from sexual activity.

The Guam MCH Program applied for and received the Abstinence Only Education (AOE) grant Program with a funding level of \$69,495. As stipulated in the FY '99 Grant Application, a "Train the Trainer" seminar was conducted, and as a result of the

seminar, there are 40 AOE Trainers to advocate at their respective work sites and within the community, the advantages of sexual abstinence, the disadvantages of being a teen parent and other related AOE issues.

Furthermore, 21 presentations at various schools were conducted in which 674 youth received Abstinence Education. Also incorporated into the presentations were communication, self-esteem, and refusal skill modules.

Moreover, the Health Educator conducted 12 classes in which 170 students from middle and high schools received education on the myths and misconceptions of sex and pregnancy and the health and socio-economic consequences of teenage pregnancy.

Performance Measure #09

The percentage of mothers who breastfeed their infants at hospital discharge.

FY ' 98 Performance Objective: 10%

FY ' 99 Performance Objective: 20%

Status: Not attained

Given the benefits of breastfeeding for the health of mother and infant in the prevention of chronic diseases and other conditions, the improved health outcomes for at-risk populations, and the economic benefits for families and the health care system, breastfeeding promotion is important to MCH's mission "to protect and improve the health of all who live on Guam."

The Department of Public Health and Social Services was awarded the State System Development Initiative Grant Program to implement "Project TASI," an acronym for "Teaching and Sharing Ideas."

Project TASI was a home-based intervention program, designed for Para-professionals to reach families experiencing multiple stresses when a child is born. To achieve the goals and objectives of Project TASI, the staff performed a review of obstetrics admissions at the Guam Memorial Hospital Authority to identify eligible clients for enrollment.

In 1999, there were 234 postpartum patients identified as eligible for Project TASI services. Out of the 234, 87 (37.17%) were totally breastfeeding their infant at hospital discharge and 91 (38.88%) were mix-feeding their infant.

The Guam Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutrition and breastfeeding education in addition to supplemental foods to the breastfeeding mother.

In 1999, the WIC Program reported 2,242 (duplicated numbers) breastfeeding mothers enrolled in the program. This was a 20.47% increase from 1998, where 1,861 women reported breastfeeding their infant.

Public Health nurses provide counseling to women on breastfeeding techniques and nutrition for the breastfeeding mother. In 1999, 2,314 women were provided this intervention; this was an increase of 49% over 1998 data where 1,550 women were provided counseling.

The Health Educator distributed 754 pamphlets about breastfeeding throughout the community. Furthermore, there were 17 Early Prenatal Counseling Classes (EPCC) in which 225 women received information with respect to breastfeeding.

The Island wide Breastfeeding Coalition provides information on the maternal and infant benefits of breastfeeding, growth spurts and the establishment of the milk supply. In 1999, the Coalition helped 76 women through the Breastfeeding Hotline and Support Group. This was a decrease of 43.7% from 1998 where 135 women sought assistance.

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaign. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention and 9) child abuse prevention.

State Performance Measure #05

Percent of childbearing age women who have been screened for cervical cancer.

FY ' 98 Performance Objective: 70%

FY ' 99 Performance Objective: 72%

Status: Attained

In 1999, there were an estimated 31,114 childbearing aged women on the island of Guam. As reported in the Behavioral Risk Factor Surveillance System (BRFSS) conducted by the Department of Public Health and Social Services, Office of Planning

and Evaluation, 194 childbearing age women were interviewed. One hundred and sixty five (165) or 85.1% of the women surveyed had ever had a Pap smear, and 157 or 80.9% of all the 18-44 year old women had a pap smear in the last 3 years.

The Department of Public Health and Social Services, Bureau of Community Health Services applied and received funding to implement the Breast and Cervical Cancer Early Detection Program (BCCEDP). The overall goals of the program are: 1) to increase the regular use of cancer screening and diagnostic services by low income women who are uninsured and underinsured; 2) to provide for public information, education and outreach; 3) to provide a system for referral, follow-up, tracking, surveillance, monitoring and case management; 4) to provide for professional education on screening, re-screening and diagnostic procedures; 5) to monitor and evaluate the program's quality and effectiveness and 6) to consolidate these goals into an island-wide comprehensive cancer control plan developed with input from a community coalition.

The need for such services is evident. Data indicate that 14% (5,783) of adult women on Guam have no health insurance and close to 49% of uninsured women are at or below 250% of poverty; this would be about 2,834 adult women. Uninsured women are less likely to have a Pap smear (77% of women 18 and over) than women with insurance. There are approximately 1,330 women on Guam who have never had a Pap test.

Cancer is the second leading cause of death on Guam, accounting for 718 (14.5%) of 4,939 deaths between 1991-1998. An average of 90 persons die annually of this disease, with a mean mortality of 62.6 per 100,000 people (non-age adjusted). In 1998, there was a 5.3% increase (from 56.7 to 59.7) as compared to the previous five year mean death rate) though the past two years (1997-1998) have shown a reduction from 1996's high mortality.

**Cancer Mortality – Guam
1994-1998 Deaths**

	# of cancer deaths	Cancer as % of deaths	Total deaths	Total population	Cancer Mortality rate per 100,000
1994	88	14.0	628	142,888	61.6
1995	10	16.0	626	143,856	69.5
1996	107	17.1	627	144,923	73.8
1997	83	13.0	639	146,328	56.7
1998	89	13.7	651	149,101	59.7
Total	377	11.89	3,171		52.03

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The Guam Family Planning Project hosted a Breast and Cervical Cancer Screening Training, which five Nurse Practitioners attended. This five-day (40 hour) breast and cervical cancer screening training session provided didactic, lab and hands-on clinical training using the "Native WEB" and Mammacare materials.

The Native WEB (Women Enjoying the Benefit), originally titled Nurse Providing Annual Screening (NPACS), is a breast and cervical cancer screening training program developed at the request of the Aberdeen and Bemidji areas of the Indian Health Service. The program was designed to meet the need for culturally sensitive female providers to make available routine annual “Well Woman” examinations.

In addition, the MCH Program has conducted numerous outreach activities within the community to inform women of the cervical cancer screening tests that are available. Furthermore, during the Early Prenatal Counseling Classes (EPCC), the Pap test is discussed in relation to postpartum care.

Preventive and Primary Care Services for Children:

Performance Measure #05

Percent of children through age 2 who have completed immunizations for measles, mumps, rubella, polio, diphtheria, tetanus, pertussis and haemophilus influenza.

FY ‘ 98 Performance Objective: 67%

FY ‘ 99 Performance Objective: 70%

Status: Not attained

There were an estimated 12,430 children aged two and under in 1999 on Guam. The Guam Immunization Program estimates that 65% of all children below the age of two are age -appropriately immunized by age two. Thus, the total for completed immunizations for the island of Guam’s children age two and under would be 8,079.

The Guam Immunization Registry has been in place since 1994. Unfortunately, the registry has not evolved over the last three years. NISE-West (a sub-contractor with the U.S. Department of Defense) installed the Guam Statewide Immunization Information System (SIIS) in 1994. Technical support, initial training, application enhancements, problem fixing and upgrades were provided for a brief period of time, as NISE-West was only on contract through part of 1996.

No additional changes have been made to the original system for the past 3 years. The Guam Immunization Program has been working to establish the Island wide Immunization Registry for the past 6 years. Currently, there are approximately 30,000 records in the system. However, immunization records have not been consistently entered into the system since 1996, leaving a 3-year backlog of data entry.

There are currently three public health centers that provide immunizations, Southern Regional Community Health Center, Northern Regional Community Health Center and Central Public Health. The Immunization Registry is not used at either the Northern or Southern Regional Community Health Centers.

The initial design of the NISE-West System incorporated dial-in access using a terminal emulation application. Currently, no private health care providers are accessing the SIIS to enter or to query data.

The MCH Program and the Bureau of Communicable Disease Control (CDC) Immunization Program provide year round immunization services. Immunization clinics are made accessible, available and free of charge. Walk-in immunization clinics are provided at the Central Public Health Center and outreach immunization services are held within villages and public sites, such as shopping centers and mayor's offices, all in an effort to improve the immunity level of Guam's children.

The Health Educator distributed 391 pamphlets regarding immunizations and the importance of age-appropriately immunizing children to the community. Furthermore, there were 17 Early Prenatal Counseling Classes (EPCC) in which 225 women received education regarding the relationship between immunizations and the prevention of childhood death and disease.

Performance Measure #07

Percent of third grade children who have received protective sealants on at least one permanent molar tooth.

FY ' 98 Performance Objective: 50%

FY ' 99 Performance Objective: 55%

Status: Not attained

On the island of Guam, it is estimated that 49% or 3,345 of the estimated 6,827-second graders have had a sealant placed on at least one permanent molar tooth.

The Dental Section of the Bureau of Community Health Services, Department of Public Health and Social Services, is responsible for the implementation of Guam Public Law 24-196 mandating basic dental care for Guam's eligible children below the age of 17 years. The scope of dental services provided includes examination, xrays, diagnosis, cleaning and sealing of teeth, fluoride treatment, treatment planning and the performance of certain treatments as required. Orthodontic treatment, complicated oral surgery and root canal therapies of multi-rooted teeth are not performed, but appropriate referrals are made.

This section is also responsible for the education of the public health measures especially the optimal use of preventive measures, which include fluoride, sealant and personal oral hygiene for the prevention of dental caries and periodontal disease.

Island wide fluoridation of the water system was completed in 1996, but Guam Waterworks Authority (GWA) stopped the fluoridation of the water wells as of March 1, 1997, because of budget constraints. Fluoridation of the water system is one of the most efficacious and cost beneficial anti-decay regimens. The discontinuation of the fluoridation was brought up at a legislative oversight hearing in May 1998 where a

request was made to fluoride the water wells again. Despite the request, GWA lacks funding to implement the procedure.

Oral health education is included as a segment of the overall health education curriculum for public school children in first through fifth grades. Additionally, the majority of children in grades 1 through 5 from public and non-public schools participate in the Dental School Busing Program where students are provided an educational program about participating and maintaining oral hygiene through proper brushing and flossing techniques.

**Dental School Busing Program
1997-1999
School Busing Dental Services**

	FY 1997	FY 1998	FY 1999
Educational Services	12,334	12,201	12,279
Dental Sealants	36,337	36,040	31,553
% of children with caries on permanent teeth	31.1%	30.7%	32.1%
% of children with caries on deciduous teeth grades 1-4	39.4%	39.6%	39.2%

Source: Department of Public Health & Social Services, Dental Health Section

In September 1999, at the Annual Regional MCH Meeting for the Pacific Jurisdictions, there was a session entitled "Oral Health Crisis in the Pacific Jurisdictions." During the discussions, there was unanimity among the jurisdictions that oral health is at a crisis point.

Furthermore, it was decided that oral health strategic planning would be part of the MCH Coordinators Conference, which would be held in late 1999.

The following issues were identified at the strategic planning sessions:

1. All jurisdictions are experiencing slow economic growth, rapid increase in population and lack of adequate health care infrastructure.
2. In all jurisdictions, there is a growing unmet oral health need, especially among children. There is a high caries prevalence in both primary and permanent dentitions of children, a high rate of early childhood caries, a high number of untreated caries among children, and insufficient use of dietary fluoride and sealants for prevention of caries.
3. There are a dwindling number of available dentists, dental nurses, and dental assistants.

With the implementation of the Child Health Insurance Program (CHIP), CHIP will be able to generate statistics to monitor the number of children receiving dental services, since dental services are one of the covered services of CHIP. The program will be able to produce statistics on children less than 1 year of age, children 1-5, 6-14 and 15-18 years of age. These statistics will be compared to the number of children enrolled in

CHIP and may reveal the availability and accessibility of dental care provided to the program.

Performance Measure #08

The rate of death to children aged 1-14 caused by motor vehicle crashes per 100,000 children.

FY ' 98 Performance Objective: 2.16

FY ' 99 Performance Objective: 2.11

Status: Not attained

Approximately 50% of all deaths to children are due to injuries and approximately 80% of these are from motor vehicle crashes. Injury is one of the most serious, economic, and medical problems of our time.

Auto fatalities ranked as one of Guam's top ten leading causes of death to adults under the age of 25, and accidents in general ranked as one of the top ten leading causes of death to children under the age of 14.

In 1998, there were an estimated 46,893 children aged 14 and under. There were six deaths (five auto collision and one auto/pedestrian) to children aged 14 and under; this resulted in a rate of death due to motor vehicle crashes of 12.79 per 100,000 children.

Preliminary data for 1999 indicates that there were an estimated 48,353 children aged 14 and under. As of December 25, 1998, there were six deaths (two auto/pedestrian; one auto/auto collision and one auto off roadway/collision with concrete utility pole which resulted in three deaths) this brought the rate of death due to motor vehicle crashes to 12.40 per 100,000 children.

The increase in population on Guam with its steady increase in the number of drivers and vehicles on the roadways, and the inability of the present highway infrastructure to accommodate the increase, has contributed significantly to the increase in motor vehicle crashes, and with it, increased health and economic cost associated with the injuries and death from motor vehicle crashes.

A recently passed law would make it more difficult to get a driver's license for drivers under the age of 18. Beginning in June 2000, all teens under the age of 18 are subject to a new system to obtain a driver permit and license on Guam. The Graduated Driver's License Law allows new drivers to get a full license only after completion of 18 months of interim training and practice.

Graduated driver licensing eases beginning drivers into traffic by limiting their exposure in driving situations proven particularly dangerous. Teens begin driving with certain conditions, which are gradually relaxed as drivers mature and develop greater driving skills.

However, the Guam Department of Revenue and Taxation has recommended postponing implementation of the new regulations for 2 years, citing a lack of money, staff, and equipment.

The Bureau of Community Health Services, as part of the Preventive Health Block Grant has targeted unintentional injuries as a priority objective.

The Health Education Section of the Bureau of Community Health Services participated in numerous community activities such as: Child Passenger Safety Awareness Week; Buckle-Up Month; Healthy Mothers Healthy Babies; Drugged, Drunk and Driving Awareness Month; the Governor's Holiday Hotline and School Opening Day. The various outreach activities resulted in over 5,000 contacts and numerous educational materials distributed.

State Performance Measure #02

Percent of children younger than 18 years old maltreated/neglected.

FY ' 98 Performance Objective: 3.5%

FY ' 99 Performance Objective: 3%

Status: Not attained

The protection of children is a value shared by all cultures and communities around the globe. In almost all societies, responsibility for raising children well and preparing them for adulthood goes beyond the parents and is shared to some degree, by the community at large. The community's investment in the well-being of its children is reflected in cultural mores and social norms, and in legal frameworks that permit intervention in individual families when children are abused and neglected.

In 1999, there were an estimated 64,169 children 18 years old and younger on Guam. There were 3,667 cases of reported maltreatment and/or abuse. Thus, the percent of children younger than 18 maltreated and/or abused stood at 5.71%. In 1998, the percent of children younger than 18 maltreated and/or abused stood at 4.30%. The rate increased by 1.41 points.

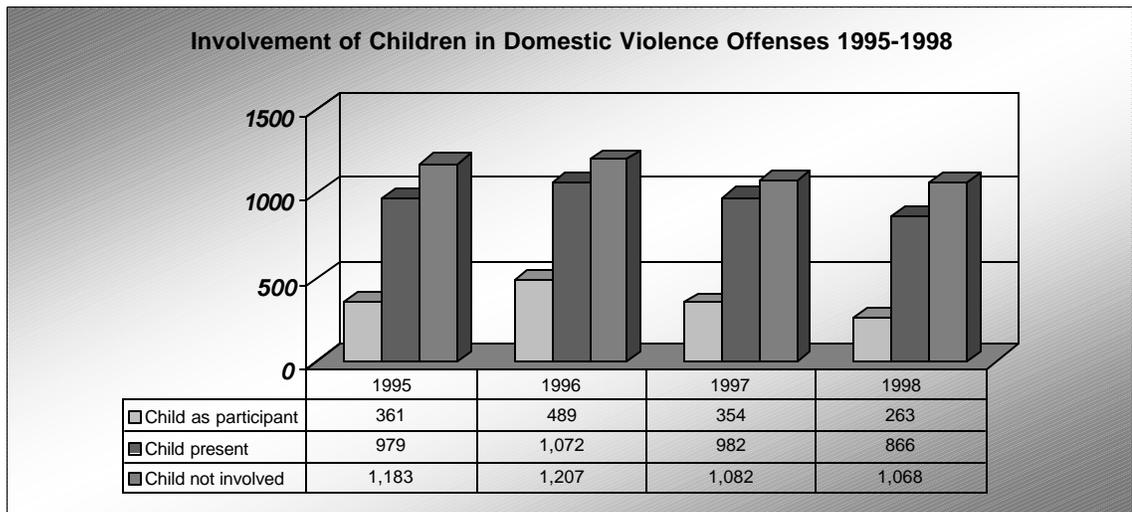
Physical abuse accounted for the greatest proportion (22.71%) of reported incidents, followed by physical neglect (19.11%), sexual abuse (7.74%) and emotional abuse (7.60%).

Reported Child Maltreatment Incidents 1995-1999

	1995	1996	1997	1998	1999
Physical abuse	711	334	522	571	813
Physical neglect	391	182	399	554	701
Emotional abuse	261	123	103	170	279
Emotional neglect	67	39	80	62	50
Sexual abuse	391	306	260	192	284
Medical neglect	170	51	139	225	227
Educational neglect	201	41	143	149	218
Lack of supervision	106	33	29	71	150
Abandonment	110	21	62	108	63
Unknown	0	0	0	0	0
Other	514	200	410	498	882
Total	2,922	1,330	2,147	2,600	3,667

Source: Department of Public Health & Social Services, Child Protective Services

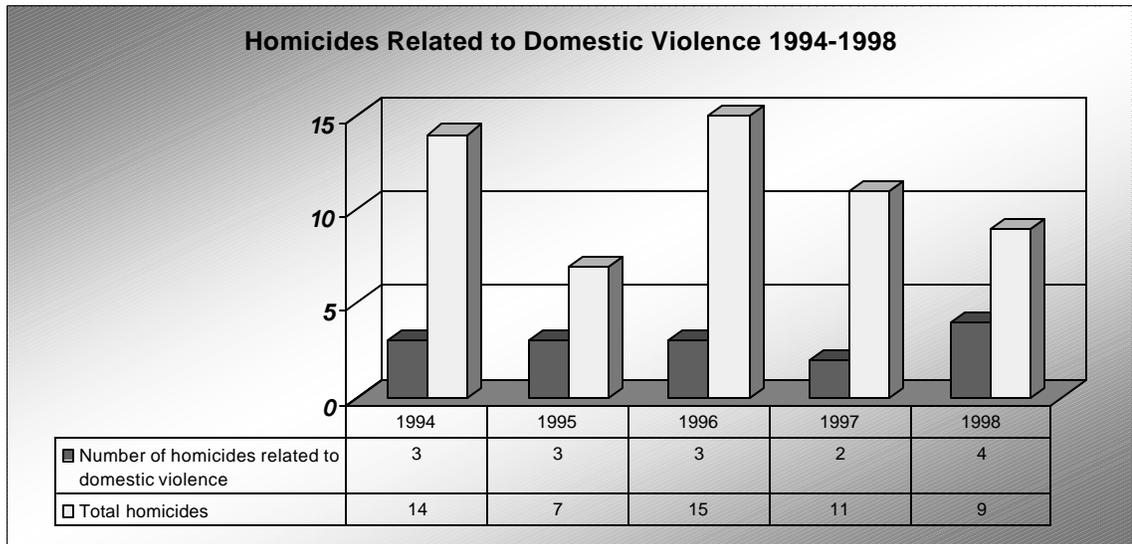
The support and commitment of the public is crucial to sustaining an effective response to child abuse and neglect. In earlier periods of history of child protection, concerned individuals and organizations stood behind an organized community response to protect children. Now public support is needed to build the consensus necessary to intervene in family life, and to generate community support that strengthens parenting and the protection of children.



Source: Uniform Crime Report, Guam Police Department 1998

Violence affects the quality of life of children who experience, witness, or feel threatened by it. In addition to the direct physical harm suffered by young victims of serious violence, serious violence can adversely affect victims' mental health and

development, and increase the likelihood that they themselves will commit acts of violence.



Source: Uniform Crime Report, Guam Police Department 1998

As a result of violence, 12 year Christine San Nicolas, 7 year Erica Aquino and 11 year old Herman Santos became victims. Society has become more aware of the need to address the causes and consequences of domestic violence. On Guam, domestic violence has had serious ramifications because of the prevalence, the potential for homicide, the effects on children in the household and the long-term emotional and physical consequences.

Client Services and Family Counseling Division of the Superior Court of Guam is the primary agency providing individual, family, and group counseling to victims and perpetrators of family violence.

Public Law 24-239 (“Guam Family Violence Act of 1998”) addresses the dilemma of family violence on Guam by directing governmental resources towards controlling the behavior, providing civil statutes and court procedures for handling family violence and by providing educational programs for the agencies involved in addressing the problem.

There are various government and non-profit organizations within the community that will respond to domestic/family/child violence. They are:

- Alee Shelter – The shelter provides a safe haven for women and children. Alee Shelter provides emergency food, clothing, shelter and assistance in contacting other needed services. The location of the shelter is kept secret to protect the safety of persons using the shelter. Anyone who needs sanctuary from violence is eligible for the services of Alee.
- Crisis Hot Line: The Hot Line provides intervention, information, and referral on a 24 hour basis. All calls are confidential.

- Healing Hearts Crisis Center: Healing Hearts provides victims of sexual assault a supportive and gentle atmosphere to begin the healing process plus medical assistance and crisis counseling and referrals.
- VARO (Victim Advocates Reaching Out): VARO provides free, confidential, and voluntary services to any victim of family violence, sexual assault/abuse, physical abuse, and other violent or traumatic events.

State Performance Measure #08

Percent of high school students who reported engaging in violence or in behaviors resulting from violence on school property.

FY ' 98 Performance Objective: 13%
 FY ' 99 Performance Objective: 12%
 Status: Not attained

Once considered sanctuaries of safety and learning, schools today are often perceived as dangerous places. The public recently has been inundated by children shooting classmates and teachers, leading to fears that violence is becoming a horrifying “trend” in schools across the nation.

Parents worry that their children may become victims of violence. Parents want their children to be safe from crime. Teenagers want the same for themselves. No one ever knowingly chooses to become a victim of violence from dates, friends, or acquaintances.

During middle and high schools, a clear adolescent status hierarchy emerges, and much of the violence at school is related to competition for status and status-related confrontations. The strongest and immediate cause of actual onset of serious violent behavior is involvement with a delinquent peer group. It is here that violence is modeled, encouraged, and rewarded; and justifications for disengaging one’s moral obligation to others are taught and reinforced.

Not much is known about why today’s youth, in increasing numbers, are carrying guns and weapons. Some evidence suggests it is to “show off”, to insure “respect” and acquiescence from others, or for self-defense.

Percentage of students in high school who reported engaging in violence related behaviors or being affected by violence on school property, by gender and grade level

	Carried a weapon on school property *+			Threatened or injured with a weapon on school property §			Felt too unsafe to go to school		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
9 th Grade	1.0	19.4	10.0	4.1	15.1	9.5	12.4	7.5	10.0
10 th Grade	8.2	12.3	10.0	2.4	10.8	6.0	9.4	10.8	10.0

11 th Grade	-	11.3	5.4	1.5	8.1	4.6	8.8	3.2	6.2
12 th Grade	3.2	14.8	8.5	6.3	11.1	8.5	4.8	14.8	9.3
Total High School	3.2	15.0	8.7	3.5	11.7	7.3	9.3	8.8	9.0

Source: "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

*+ On one or more of the 30 days preceding the survey§One or more times during the 12 months preceding the survey + Such as a gun, knife, club

As reported in "1999 Safe and Drug Free Schools and Communities Study of Youth Risk Behaviors," associations between substance use and measures of violence were found among all students.

As shown below, students who said they were current drug users were more likely to say they had been in fights in the past year (45%) than those who were classified as experimenters (30%) or non-users (14%). Current users were also more likely to report being injured in a fight where they needed to be treated by a doctor or a nurse (7%), and also were more likely to have been threatened or injured with weapons such as guns, knives or clubs on school property.

Current substance users were also found to be more likely to report that they have carried weapons onto school property (13%) and to fear going to school (12%) to the point where they have skipped school

**Violence and Fighting at School
By Index of Substance Abuse**

	Non-user (N=97) %	Experimenters (N=196) %	Current user (N =283) %
In a physical fight			
Yes	14	30	45
No	86	70	55
Injured in a fight			
Yes	1	4	7
No	99	96	93
Threatened or injured by a weapon on school property			
Yes	3	5	10
No	97	95	90
Fought on school property			
Yes	8	12	15
No	92	88	85

Source: "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Services for Children with Special Health Care Needs (CSHCN):

Performance Measure #04

Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, and hemoglobinopathies.

FY ' 98 Performance Objective: 99%
 FY ' 99 Performance Objective: 100%
 Status: Not attained

In 1998, 3,847 births occurred at the Guam Memorial Hospital Authority (GMHA). GMHA screened 3,708 (96%) of the newborns for metabolic disorder. The number screened did not include the number of infants who expired before newborn screening testing or births that occurred at home. Out of the 3,708 newborns, 170(4.58%) tested positive. Of the positive screens, it is likely some, if not most, of the positive screens were false positive, possibly due to the newborn screens being performed within 8 hours after birth, prior to discharge from the hospital. The extremely high number of babies born at our relatively small hospital makes rapid discharge from the nursery essential.

The MCH Program has taken the lead to implement a tracking system for the Newborn Metabolic Screening Program. Guam Memorial Hospital Authority (GMHA) routinely

conducts newborn metabolic screens for all neonates born at the GMHA. However, there was no mechanism in place for tracking babies with abnormal metabolic screens or any indication whether a repeat test or early intervention was done to the client. In 1998, MCH developed a disposition form for tracking abnormal screens done at GMHA and to ensure that the physicians (private and public) do a repeat test as scheduled, confirm a diagnosis, and provide early intervention and treatment, as necessary. As of October 1999, there were 186 disposition forms received by the MCH Program. Initially, the submission of the disposition forms was slow, but the submission of the form has tremendously improved within the past months as a result of continual awareness education given to the physicians during the monthly Pediatrician Committee and Family Practice Committee Meetings held at GMHA.

Performance Measure #10

Percentage of newborns who have been screened for hearing impairments before hospital discharge.

FY ' 98 Performance Objective: 2.43%

FY ' 99 Performance Objective: 5%

Status: Not attained

The Guam Memorial Hospital Authority (GMHA) acquired the Distortion Product Otacoustic Emission Equipment (DPOAE). The newly acquired instrument was to be used by the GMHA Nursery nurses on newborns prior to discharge. Those failing or who are recommended for further evaluation, or those not seen for DPOES prior to discharge, are seen at the Pediatric Evaluation and Development Services (PEDS). Unfortunately, the testing tool at GMHA has malfunctioned and it is not known if replacement parts are available.

In April 1999, Dr. June Holstrum, from the Centers for Disease Control and Prevention was on Guam to discuss the Newborn Hearing Screening Program with various representations from Guam Memorial Hospital Authority, the Department of Public Health and Social Services, the Department of Mental Health and Substance Abuse, the Department of Education- Special Education Division and the University of Guam Affiliated Programs. Dr. Holstrum demonstrated the administration of the Bayley Infant Development Screening Instrument. The instrument is being considered by the Guam Early Intervention System.

The Pediatric Evaluation and Development Services (PEDS) conducted the following evaluation in 1999:

Audiologist/Audiometrist (DPOAE)	425 clients
Audiologist (Auditory Brainstem Response)	7 clients
Speech/Language Pathologist	218 clients

Following the implementation of P.L. 25-72, the staff audiologist took advantage of the "Voluntary Separation Option." This will leave the diagnostic unit with only the Audiometrist, limiting audiological services to only hearing screening testing.

INFRASTRUCTURE BUILDING SERVICES:

National Performance Measures 11, 12, 13, 15, 16 and 18 and State Performance Measures 6 and 7 address Infrastructure Building Services for the following population groups as follows:

Primary and Preventive Care for Pregnant Women, Mothers and Infants:

Performance Measure #15

Percent of very low birth weight births.

FY ' 98 Performance Objective: .99%

FY ' 99 Performance Objective: .98%

Status: Attained

In 1998, there were 4,322 recorded live births on the island of Guam. Of the recorded births, there were 31 (0.71%) births with very low birth weight (1500 grams or less).

The MCH Program conducts an Early Prenatal Counseling Class (EPCC) that provides information on the adverse effects of alcohol, recreational drugs and tobacco usage during pregnancy. In addition, prenatal clients are assessed for unhealthy behaviors and health risks during the initial interview and examination.

Due to the lack of nursing personnel, a program was implemented in late 1999 to accommodate the large number of prenatal clients seeking services. This program, a Prenatal Interview Group Session, combined the Prenatal Interview, Prenatal Evaluation and the Early Prenatal Care Class. There have been 32 Group Sessions, with an average of 15 prenatal clients per session.

In 1999, the MCH Program counseled 1,046 women on unhealthy behaviors and the effect these behaviors may have toward giving birth to a low birth weight infant. Of the 1,046 prenatal patients, there were 753 (71.98%) referred to the EPCC.

Furthermore, women with inappropriate weight gain, nutritional risk, and/or anemia were referred to the WIC Program. In 1999, there were 708 women referred.

The use of alcohol, tobacco, and illegal substance during pregnancy is a major risk factor for low birth weight and other poor infant outcomes.

The use of Crystal Methamphetamine ("ice") has increased to epidemic proportions. This drug was first introduced to the island in 1990 and has become a drug of preference. There are 3 main reasons for its popularity: 1) it is easily available and

accessible; 2) users get a “high” that can last 12 to 14 hours from one “hit”; and 3) the price of the drug is cheaper than heroin and cocaine.

Despite the increased focus on intervention, many pregnant women do not receive the help they need. Reasons for not receiving treatment may include ignorance, poverty, lack of available services and fear of criminal prosecution, which may lead addicted women to conceal their drug usage from medical providers and further jeopardize the pregnancy outcome.

In 1999, there were 68 referrals to the Department of Education, Special Education Division, Guam Early Intervention System from various services providers working with women and children.

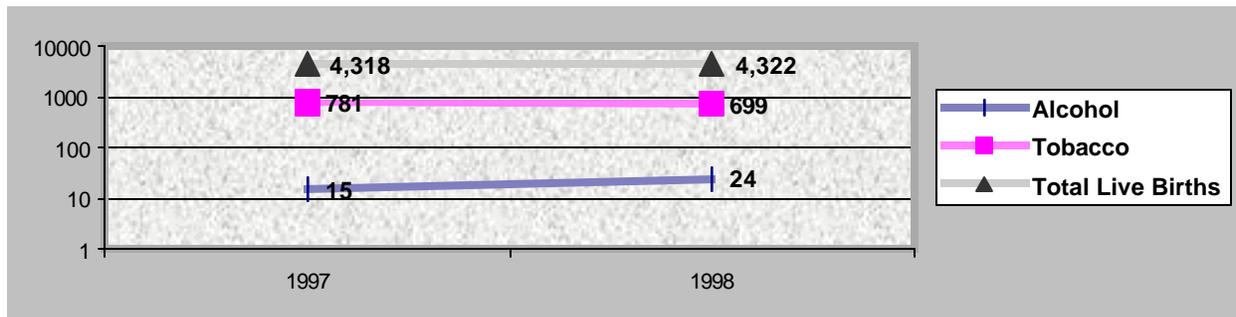
**Referral to Guam Early Intervention System for Children Prenatally Exposed to Drugs
Calendar Year 1999**

	Mom Positive	Mom & Child Positive	History of Ice Usage	Baby Positive	Total
Jan.	8	2	2	0	12
Feb.	3	4	2	3	12
March	5	2	0	0	7
April	1	1	0	0	2
May	2	0	0	0	2
June	2	0	0	0	2
July	3	1	0	0	4
August	6	0	1	0	7
Sept.	0	3	1	1	5
Oct.	3	0	1	1	5
Nov.	5	0	1	0	6
Dec.	0	0	4	0	4
Total	38	13	12	5	68

Source: Department of Education, Division of Special Education

Smoking during pregnancy is linked to low birth weight, preterm delivery, SIDs, and respiratory problems in newborns. Heavy alcohol use is associated with Fetal Alcohol Syndrome (FAS) and even moderate alcohol use has demonstrated effects on preterm delivery. In addition to the human cost, the economic cost of service to substance abuse exposed infants is great.

Live Births by Alcohol and Tobacco Usage of Mother



Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Performance Measure #18

Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

FY ' 98 Performance Objective: 68%

FY ' 99 Performance Objective: 70%

Status: Not attained

Out of the 4,322 live births that occurred in 1998, 2,708 (62.7%) of the infants were born to women who received prenatal care in the first trimester.

Live Births by Age of Mother and Month of Prenatal Visit - 1998

	Month of First Prenatal Visit										Total
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th /9 th	None	Not rept	
Under age 15	0	1	2	0	1	0	1	1	1	0	7
15-19	54	99	89	94	71	45	14	17	27	1	511
20-24	218	252	220	121	117	79	57	85	69	1	1,219
25-29	324	263	246	102	94	62	34	60	65	2	1,252
30-34	233	211	167	76	45	30	28	37	21	0	848
35-39	93	106	65	36	26	18	14	17	18	1	394
40-44	18	22	18	8	0	6	2	5	3	0	82
45-49	1	2	3	1	1	0	0	0	0	0	8
Not reported	0	1	0	0	0	0	0	0	0	0	1
Total	941	957	810	438	355	240	150	222	204	5	4,322

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Prenatal care includes three major components: risk assessment, treatment for medical conditions or risk reduction and education. Each component can contribute to reduction in perinatal illness, disability and death by identifying and mitigating potential risks and helping women to address behavioral factors that contribute to poor outcomes.

In 1999, 735 pregnant women were referred to Medical Social Services for income eligibility and social work intervention. This was a decrease of 45.95% from 1998, when 1,360 women were referred to Medical Social Services.

There were 249 OB/GYN clinics where 2,763 prenatal encounters occurred. Furthermore, in 1999, there were 707 HCG tests conducted and 555 new prenatal clients seen in the clinics.

Preventive and Primary Care Services for Children:

Performance Measure #12

Percent of children without health insurance.

FY ' 98 Performance Objective: 14%

FY ' 99 Performance Objective: 13%

Status: Not attained

As reported in the Behavioral Risk Factor Surveillance System (BRFSS) conducted by the Department of Public Health and Social Services, Office of Planning and Evaluation, there were approximately 9,996 uninsured children on Guam. In 1999, there were approximately 64,393 children below the age of 18. Using the 9,996 figure for uninsured children on Guam, the percentage of uninsured children stood at 15.52%.

The island of Guam applied for the Children's Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide benefits similar to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

Performance Measure #13

Percent of potentially eligible children who have a service paid by the Medicaid Program.

FY ' 98 Performance Objective: 33%

FY ' 99 Performance Objective: 34%

Status: Attained

It is estimated that 3,437 children will receive a service by the Medicaid Program. Using the 9,996 figure for uninsured children on Guam, the percent of potentially eligible children who have received a service paid by the Medicaid Program stands at 34.38%.

Guam's Department of Public Health and Social Services implements medical assistance programs, which strive to reach uninsured and underinsured women, infants, children and youth through programs such as the Maternal and Child Health (MCH) Program, the Medicaid Program (MAP) and the Medically Indigent Program (MIP).

The Department of Public Health and Social Services operates in three strategic locations, central, northern and southern Guam, which provide services to the entire population of the island, aside from services from private health providers. Public health nurses, school nurses, medical social workers and eligibility workers in the community inform and assist families and children in applying for medical assistance program(s) through community outreach dissemination.

Performance Measure #14

The degree to which the State assures family participation in program and policy activities in the State CSHCN Program.

FY ' 98 Performance Objective: 10%
FY ' 99 Performance Objective: 12%
Status: Not attained

Out of the possible eighteen points, the Guam MCH Program scored 10 points. The Guam MCH Program mostly met the characteristics of (a) family members participate on advisory committees or task forces and are offered training, mentoring and reimbursement, when appropriate; (b) financial support is offered for parent activities or parent groups; (c) family members are involved in the Children with Special Health Care Needs' elements of the MCH Block Grant Application process; (d) family members of diverse cultures are involved in in-service training of CSHCN staff and providers and (e) family members of diverse cultures are involved in all activities. The Guam MCH Program did not meet the characteristics of family members are hired as paid staff or consultants to the State CSHCN Program.

Performance Measure #16

The rate of suicide deaths among youth aged 15-19.

FY ' 98 Performance Objective: 44
FY ' 99 Performance Objective: 43
Status: Not attained

In 1998, 5 youth committed suicide. There was an estimated 11,445 youth aged 15-19, thus the rate of suicide deaths was 43.68 per 100,000 youth.

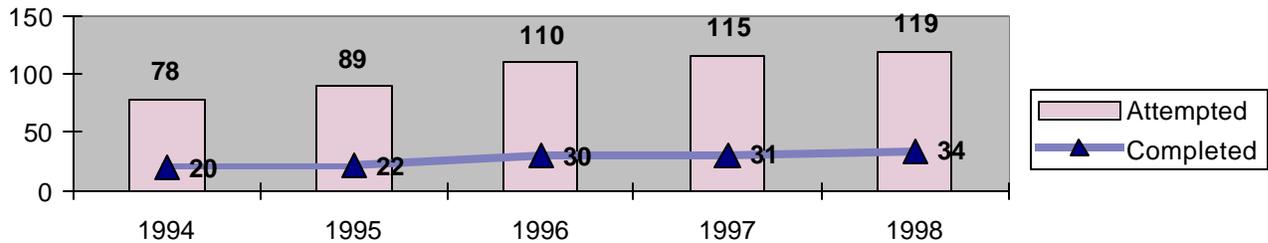
Suicide is the second leading cause of death to youth 15-19 on Guam and a serious potential outcome of mental illness and mental disorder. Mental disorder such as various forms of depression, schizophrenia, panic disorders and adjustment and stress

reactions as well as alcohol and other drug abuse have been implicated in both attempted and completed suicide.

The MCH Program refers youth that express ideation of self-harm to Medical Social Services of the Department of Public Health and Social Services. The Social Worker then provides counseling, intervention, and/or referral to the Department of Mental Health and Substance Abuse for further evaluation and diagnosis.

On Guam, most suicide attempters are female (78%). The trend shows that attempts are increasing in the age group of 14-18 years old. The prevailing pattern is 2 to 3 attempts then either the attempt is completed or the individual receives intervention. Most completed suicides are by males. The pattern is completion with the first attempt. Methodology is hanging (65%) and then firearms (25%).

Suicide Analysis Guam 1994-1998



Source: Uniform Crime Report 1998, Guam Police Department

Unfortunately, it is difficult to identify particular individuals at greatest risk for suicidal behaviors or completed suicide. Prevention of suicide must rest on a thorough knowledge of risk factors. Understanding risk factors can help dispel the myths that suicide is a random act or results from stress alone. Suicide prevention demands approaches that reduce the likelihood of suicide before vulnerable individuals reach the point of danger.

Percentage of students in high school who reported having seriously considered attempting suicide* and who reported suicidal behavior, by gender and grade level -Guam

	Seriously considered attempting suicide*			Made a suicide plan*			Attempted suicide*		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
9 th Grade	32.3	14.0	23.3	29.5	21.7	25.7	30.9	5.4	18.4
10 th Grade	40.0	27.7	34.7	35.3	20.0	28.7	27.1	21.5	24.7
11 th Grade	32.4	19.37	26.4	33.8	21.3	27.9	16.2	11.3	13.8
12 th Grade	33.3	25.9	29.7	38.1	28.3	33.3	22.2	14.8	18.6
Total High School	34.6	20.9	28.2	33.8	22.5	28.5	24.9	12.4	19.0

Source: "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

* During the 12 months preceding the survey

State Performance Measure #07

The development of a prevalence rate of childhood obesity at Kindergarten.

FY ' 98 Performance Objective: 50

FY ' 99 Performance Objective: 45

Status: Not attained

Child overweight and child obesity is a multi-faceted problem that should be addressed by promoting healthy eating and increasing physical activity and decreasing inactivity. Care must be taken not to encourage weight preoccupation, inappropriate eating habits and extreme amounts of exercise associated with eating disorders in youth.

There are approximately 4,086 Kindergarten students attending public and private schools on the island. It is estimated that 55% (2,247) are overweight,

Research shows that 60% of overweight 5 to 10 year old children already have at least one risk factor for heart disease, including hyperlipidemia and high blood pressure or insulin levels. Type 2 Diabetes, a disease that typically appears in adults, is increasing at alarming rate among children and adolescents. Obese children also have more hypertension, sleep apnea, and liver disorders.

As part of the Preventive Health Block Grant, the Bureau of Community Health Services, Nutrition Health Services has established "Team Nutrition". Team Nutrition is comprised of professionals that are experts in the field of nutrition both public and private. A resource guide was compiled and distributed to the public listing all the members of Team Nutrition.

Furthermore, five lesson plans were developed and presented at various elementary schools (public and private) in 1999. One thousand two hundred and sixty five (1,265) students were presented with the following:

- Food Guide Pyramid
- Parts of a Plant
- Physical Activity is Healthy For Our Bodies
- Sometimes Less is Better
- The Nutrition Label

In addition to the students, 195 of the National School Lunch Program food service workers attended a two-day Food Services Training Conference.

Services for Children with Special Health Care Needs (CSHCN):

Performance Measure #11

Percent of Children with Special Health Care Needs (CSHCN) in the State CSHCN Program with a source of insurance for primary and specialty care

FY ' 98 Performance Objective: 69%
 FY ' 99 Performance Objective: 70%
 Status: Not attained

Of the 914 active cases enrolled in the State CSHCN Program, 562 (61.48%) had a source of insurance for primary and specialty care. This was a rise of 2.74% from 1998, where 547 (60.30%) had a source of insurance.

**Insurance Status CSHCN Program
 1998-1999**

	MIP	MAP	Private	None	Total
0-3 yr old '98	35	33	25	93	186
0-3 yr old '99	34	37	32	86	189
4-21 yr old '98	75	140	239	267	721
4-21 yr old '99	68	153	238	266	725

Source: Department of Public Health & Social Services, Maternal and Child Health Program

The Maternal and Child Health Bureau uses the definition of a “medial/health home” as: “medical care of infants, children and adolescents that is accessible, continuous, comprehensive, family-centered, coordinated and compassionate. It should be delivered or directed by well-trained physicians who are able to manage or facilitate essentially all aspects of care.”

Health care for the island’s CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), and the Medicaid Program (MAP) and through local health maintenance organizations (HMO’s) and private clinics under self-pay. Public health nursing personnel conduct case findings and make appropriate referrals to the MIP and MAP.

The goal of the CSHCN component is to ensure access to quality comprehensive community-based health care systems for all infants, children, and adolescents with special health care needs.

State Performance Measure #07

To improve the referral system of infants under the age of one year to DPHSS, CSHCN Program for entry into the CSHCN Registry.

FY ' 98 Performance Objective: 25
 FY ' 99 Performance Objective: 27
 Status: Not attained

In existence is the 1997 Memorandum of Agreement (MOA) between the University of Guam, Guam University Affiliated Program, Department of Education, Special

Education Division, Guam Memorial Hospital Authority, the Departments of Public Health and Social Services and Mental Health and Substance Abuse for the promotion and operation of the Pediatric Evaluation and Development Services (PEDS).

In 1998, the Department of Education (DOE) and the University of Guam decided to do research on model programs for early intervention services. PEDS, the diagnostic component, was managed by UOG while the Infant and Toddler Program, the intervention component, was managed by DOE.

The Department of Education, the lead agency for the Guam Early Intervention System (GEIS), supports the full inclusion of infants and toddlers with or “at risk” for developmental delays and their families. The Guam Early Intervention System is comprised of two units, both located at the University of Guam, which provide services and support for infants and toddlers and their families eligible for early intervention services under Part C of the Individuals with Disabilities Education Act (IDEA). These are the Diagnostic Unit and the Intervention Unit.

Diagnostic Unit:

Pediatric Evaluation and Developmental Services (PEDS) provides identification, referral, screening, evaluation, assessment and intervention services for children from birth to age three. Developmental areas evaluated and assessed by PEDS staff include hearing, gross and fine motor, speech and language and cognitive abilities.

The Infant Diagnostic Team (IDT) provides immediate intervention services to newborns at the Guam Memorial Hospital's Neonatal Intensive Care Unit (NICU) or the intermediate care nursery. The IDT includes a registered nurse, as well as a developmental specialist to ensure that newborns receive services as soon as possible.

The Rapid Response Team (RRT), in addition to the regular PEDS Team, is a diagnostic team that has been working to provide evaluation and assessment services outside the regular normal workweek. The team is comprised of a social worker, speech pathologist, occupational therapist, physical therapist and developmental specialist who are available as needed to accommodate families after hours and on weekends.

Intervention Unit:

The Infant/Toddler Program is comprised of nurses, social workers, teachers, paraprofessional and child development specialists, that provide family support and intervention services for children who are eligible for GEIS services.

The Community Integrated Play Groups are located in the community centers and are facilitated by GEIS Play group teachers and paraprofessionals. Play group families' meet four times a week and include not only families of children with developmental delays and their siblings, but also families of "typical" children from within the community.

Child Find is an aggressive community outreach to screen newborns through five year old in the areas of health, hearing, vision, speech and language, cognitive and social development.

In 1998, 3,847 births occurred at the Guam Memorial Hospital Authority (GMHA). GMHA screened 3,708 (96%) of the newborns for metabolic disorders. The number screened did not include the number of infants who expired before newborn screening testing or births that occurred at home. Out of the 3,708 newborns, 170(4.58%) tested positive. Of the positive screens, it is likely some, if not most, of the positive screens were false positive, possibly due to the newborn screens being performed within 8 hours after birth, prior to discharge from the hospital. The extremely high number of babies born at our relatively small hospital makes rapid discharge from the nursery essential.

The MCH Program has taken the lead to implement a tracking system for the Newborn Metabolic Screening Program. Guam Memorial Hospital Authority (GMHA) routinely conducts newborn metabolic screens for all neonates born at the GMHA. However, there was no mechanism in place for tracking babies with abnormal metabolic screens or any indication whether a repeat test or early intervention was done to the client. In 1998, MCH developed a disposition form for tracking abnormal screens done at GMHA and to ensure that the physicians (private and public) do a repeat test as scheduled, confirm a diagnosis, and provide early intervention and treatment, as necessary. As of October 1999, there were 186 disposition forms received by the MCH Program. Initially, the submission of the disposition forms was slow, but the submission of the form has tremendously improved within the past months as a result of continual awareness education given to the physicians during the monthly Pediatrician Committee and Family Practice Committee Meetings held at GMHA.

2.5 PROGRESS ON OUTCOME MEASURES

Outcome Measure #01

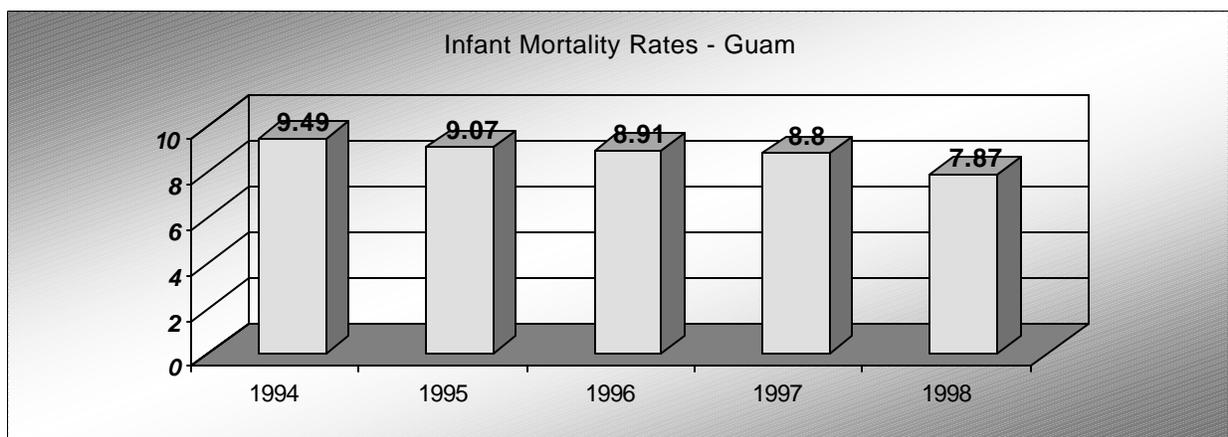
The infant mortality rate per 1,000 live births.

FY '98 Performance Objective: 8.5

FY '99 Performance Objective: 8.3

Status: Attained

The infant mortality rate decreased in 1998. The rate stood at 7.87 infant deaths per 1,000 live births. Although Guam's infant mortality rate decreased, it nevertheless remains high. Guam's high rate may be attributed to the following: inadequate or lack of prenatal care; inadequate or poor nutrition during pregnancy; substance misuse and/or abuse during pregnancy; congenital anomalies and environmental exposure to toxic substances.



Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaigns. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention; and 9) child abuse prevention.

Outcome Measure #03

The neonatal mortality rate per 1,000 live births.

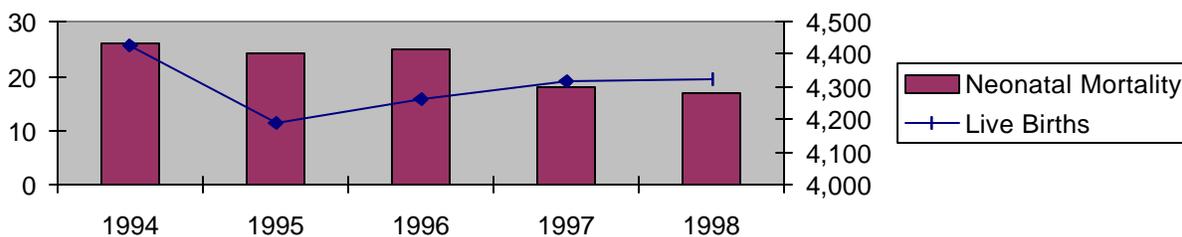
FY ' 98 Performance Objective: 4.5

FY ' 99 Performance Objective: 4.4

Status: Attained

Similar to the infant mortality rate, the neonatal mortality rate declined. In 1998, the neonatal mortality rate was 3.93 per 1,000 live births.

Neonatal Mortality And Guam Births



Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The MCH Program conducts an Early Prenatal Counseling Class (EPCC) that provides information on the adverse effects of alcohol, recreational drugs and tobacco usage during pregnancy. In addition, prenatal clients are assessed for unhealthy behaviors and health risks during the initial interview and examination.

Due to the lack of nursing personnel, a program was implemented in late 1999 to accommodate the large number of prenatal clients seeking services. This program, a

Prenatal Interview Group Session, combined the Prenatal Interview, Prenatal Evaluation and the Early Prenatal Care Class. There have been 32 Group Sessions, with an average of 15 prenatal clients per session.

Outcome Measure #04

The postneonatal mortality rate per 1,000 live births.

FY ' 98 Performance Objective: 4.5
FY ' 99 Performance Objective: 4.25
Status: Attained

The postneonatal mortality rate for the island of Guam in 1998 was 3.93 per 1,000 live births.

The nursing staff of the Department of Public Health and Social Services continues to encourage and teach expectant mothers the aspects of what to expect throughout their pregnancy and health practices that promote good health and viability of the neonate/infant's first year of life.

Outcome Measure #05

The perinatal mortality rate per 1,000 live births.

FY ' 98 Performance Objective: 17
FY ' 99 Performance Objective: 15
Status: Attained

In 1998, the perinatal mortality rate decreased to 12.8 per 1,000 live births after a high in 1997 of 19.4 per 1,000 live births.

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaign. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention and 9) child abuse prevention.

Outcome Measure #06

***The child death rate per 100,000
children aged 1-14.***

FY ' 98 Performance Objective: 31

FY ' 99 Performance Objective: 30

Status: Attained

In 1998, there were 46,893 children in the age group 1-14. There were 24 deaths within the age group. The child death rate per 100,000 was 5.12.

The Bureau of Community Health Services, as part of the Preventive Health Block Grant has targeted unintentional injuries as a priority objective.

The Health Education Section of the Bureau of Community Health Services participated in numerous community activities such as: Child Passenger Safety Awareness Week; Buckle-Up Month; Healthy Mothers Healthy Babies; Drugged, and Drunk and Driving Awareness Month; the Governor's Holiday Hotline and School Opening Day. The various outreach activities resulted in over 5,000 contacts and numerous educational materials distributed.

State Outcome Measure #06

The fetal death rate per 1,000 live births.

FY ' 98 Performance Objective: 13
FY ' 99 Performance Objective: 12
Status: Attained

The fetal death rate for 1999 was 11.51 per 1,000 live births. There were 47 fetal deaths in 1999.

	1994	1995	1996	1997	1998	1999
Fetal Death rate	12.27	9.22	10.44	15.73	12.11	11.51

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaigns. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention; and 9) child abuse prevention.

3.1 NEEDS ASSESSMENT OF THE MATERNAL AND CHILD HEALTH POPULATION

The promise of a healthier United States in the year 2000 is predicated on a national agenda that includes within its assessment of the health of the total population an examination of specific groups at the greatest risk for poor health.

Overall, quality of life is often reflected in health status indicators. The health status of Guam can be examined by highlighting a few commonly accepted health indicators such as life expectancy, leading causes of death, death rates, and infant mortality.

Health service staff on Guam faces the challenge of cultural, professional and technological adaptation to changes in health care needs and essential services. There is a notable shortage of primary care staff, facilities, and equipment. Some diagnostic and treatment services, such as specialty services for cardiovascular, neurological and neoplasm related services are referred to Honolulu, Los Angeles, and the Philippines.

The lack of adequate facilities and services are exacerbated by shortages of personnel. The U.S. Department of Health and Human Services has classified Guam as medically underserved and as a Health Professional Shortage Area because of the shortage of medical personnel in a given community.

The lack of sufficient health personnel detrimentally influences the establishment of “routine and regular” sources of care, which are essential to health promotion and disease prevention efforts.

3.1.1 NEEDS ASSESSMENT PROCESS

MCH will continue to conduct needs assessments year round. Updated data and information will be added to the database when it becomes available. Because Family Planning is an integral part of the MCH database, the approach to needs assessment and system development takes into account the comprehensive needs of service recipients, as well as the expanded database.

Yearly updates will be used to make appropriate adjustments in such activities as plan development, funding formulas, quality assurance, and standards development. This incremental data base development will allow better depth, breadth and quality, as well as the identification and use of new data resources. Every five years the total needs assessment will be conducted and annual plans will be adjusted to reflect the new analysis.

The following is a general outline of the MCH Needs Assessment methodology.

Phase I: Organization of the Planning Project

This phase includes establishing the overall purpose, the desired outcomes, assigning staff and defining their roles.

Define the target population about which the information for the needs assessment is desired. For the island of Guam, the population is:

- All pregnant women in a given year;
- Mothers;
- Infants less than one year of age; and
- Children aged 1-22 (including Children with Special Health Care Needs).

Organize a planning group. To adequately address the needs of the population, individuals must be identified who represent the varied interests of the population and professionals who can provide valuable information and expertise.

The planning group is comprised of the following:

1. Representation from external groups (i.e., Public Safety, Special Education, etc.)
2. Service providers from within the community (i.e., Private providers, school teachers, etc.)
3. Service providers from within the health system (i.e., Public health providers, nurses, etc.)
4. Consumer representatives (i.e., parents, teens, CSHCN and parents of CSHCN, etc.)

Phase II: Data Collection

The second phase is the collection of the information to set the scope and prioritize the issues.

Most of the data used to assess the needs was derived from other primary data sources. The following lists some of the key data sources and collaborators that have been and will continue to be used:

- Maternal and Child Health Program, Department of Public Health and Social Services (DPHSS)
- Family Planning Project, DPHSS
- Office of Epidemiology and Research, DPHSS
- Office of Planning and Evaluation, DPHSS
- Bureau of Community Health Services, DPHSS
- Nutrition Health Services, Guam WIC Program, DPHSS
- Office of Professional Licensure, DPHSS
- Guam Memorial Hospital Authority
- Department of Education
- University of Guam
- Sanctuary Inc.
- Superior Court of Guam
- Division of Public Welfare, DPHSS

Phase III: Briefing Paper

This phase involves the development of briefing papers examining the prioritized needs in detail.

Phase IV: Draft Paper

This phase is the processing of the collected information and incorporating the comments regarding the briefing papers into a draft report. The report will describe the current service delivery systems, and the views of families, service providers, community members, and representatives from governmental agencies.

Phase V: Public Hearing

The distribution of the draft report and holding a public forum for comment on the report and to hear additional views regarding the systems of comprehensive and coordinated care.

Phase VI: Final Report

The completion of a report, which includes written comments and testimony from the public.

Phase VII: Strategic Plan

The development of a strategic plan for implementing necessary service changes or improvements as determined by the Needs Assessment. The process for developing the strategic plan will be dependent upon the results of the previous phases.

Although Public Health takes the lead in collecting public health data, Public Health is only one of the many partners that collect, analyze, and use the data. Many programs collect vital information. If data are not available or missing, problems can arise, in particular health problems may not be identified in high-risk populations or intervention may not be timely enough.

3.1.2 NEEDS ASSESSMENT CONTENT

3.1.2.1 OVERVIEW OF THE MATERNAL AND CHILD HEALTH POPULATION'S HEALTH STATUS

The health status of women and children on Guam and the health care they receive are issues of continuing and growing concern. A review of health status indicators such as infant mortality, low birth weight, childhood mortality rates from injury and the incidence of child abuse and neglect confirm this reality. Despite numerous efforts, both private and public, many women and children are not receiving the comprehensive services they need in order to lead healthy productive lives.

The turn of the century offers an opportune time to take stock of the current state of maternal and child health and make plans for the future. In the last few years, the field of maternal and child health has been confronted by a host of new challenges and opportunities: a rapidly changing health care delivery system driven by cost containment and reduced public health care expenditure, social welfare policy reforms that profoundly alter the lives of poor women and children, continuing trends toward devolving responsibility for health and social programs from the federal government to the states and from states to communities, and the resurgence of health activism that has changed health and research policies and priorities.

Geography and climate:

Guam is situated in the Western Pacific. The United States' western-most territory lies about 5,800 (12 hours flight time) from the U.S. mainland, and 3,800 miles (7 hours flight time) southwest of its closest U.S. neighbor, Hawaii. Guam, while being remote from the United States, is closer to the Asian rim. Tokyo, Taipei, Manila, and Hong Kong are all within three hours flight time.

Guam is the largest and southernmost of the Mariana Island and lines up along 145 meridian, east of Greenwich at 13 degrees of north latitude. The island was formed by volcanic action, coral growth, and uplift of submarine mountain ranges. It is 32 miles long, 4 to 12 miles wide, and encompasses 212 square miles.

The northern third of Guam is a broad limestone plateau with steep coastal cliffs and no surface rivers. The Central part of the island, lies northeast of a fault line that crosses the middle of the island from the villages of Agana to Yona, Central and Northern Guam consist of low lands and high limestone terraces; they are the most urbanized and heavily populated. The Southern area of Guam is distinguished by a line of volcanic peaks. A mixed terrain slopes eastward from the peaks, with several rivers flowing through eroded valleys to the coast. The rural villages of Umatac, Merizo, and Inarajan dot the southern coast line, and represent the most culturally conservative part of Guam's population.

The climate is tropical, with high humidity and an average annual temperature of 82 degrees Fahrenheit (daily range 74-96 degrees). The early months of the year, the “dry” season, are cooler due to the prevailing trade winds from the east and northeast. The later months are dominated by monsoon winds from the south and southwest, bringing the warmer and wetter “rainy” season. Guam receives an average 90 inches of rainfall annually, 75% of which occurs in the wet season. Typhoons are a recurrent feature each year. The Super-typhoons Omar in 1992 and Paka in 1997 destroyed millions of dollars worth of property, but warning systems prevented the loss of lives.

Population:

Ethnic Distribution:

Guam is and will continue to be an ethnically diverse community of approximately 151,965 (Mid-year 1999 estimate, Office of Planning and Evaluation, Department of Public Health and Social Services). In 1994, approximately 45% of the population were full or part Chamorro (indigenous population), by 1999, this increased to over 49% due to the reduction of military personnel and dependents.

**Ethnic Distribution
Guam 1994-1999**

	1994		1995		1996		1997		1998		1999	
Chamorro	64,409	45.07%	67,596	46.98%	69,741	48.12%	71,889	49.12%	73,251	49.12%	74,658	49.12%
Filipino	34,071	23.84%	34,234	23.79%	35,042	24.17%	35,788	24.45%	36,466	24.45%	37,167	24.45%
White	15,390	10.77%	14,518	10.09%	13,709	9.45%	12,968	8.86%	13,214	8.86%	13,467	8.86%
Micronesian	5,275	3.69%	5,444	3.78%	5,624	3.88%	5,816	3.97%	6,990	4.6%	7,123	4.68%
Black	2,321	1.62%	2,006	1.39%	1,827	1.26%	1,632	1.11%	1,663	1.11%	1,695	1.11%
Asian	10,739	7.51%	10,697	7.43%	10,919	7.53%	11,071	7.56%	11,281	7.56%	11,498	7.56%
Other	10,683	7.47%	9,361	6.50%	8,061	5.56%	7,161	4.89%	6,236	4.18%	6,357	4.18%
Total Population	142,888		143,856		144,923		146,325		149,101		151,965	

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Racial and ethnic groups may have differing age structures or variations in cultural norms that may be important in planning health services and programs.

Furthermore, linguistic isolation may reduce access to care. It is important to be aware of population heterogeneity when considering new health policies.

Population Distribution:

Besides the shift in ethnic distribution, Guam has also experienced a change in population distribution. The choice of residency of the original inhabitants of Guam was dictated by the terrain of the island. Since they had to reside close to cultivable land and fresh water sources most lived in the central and southern regions as well as in the coastal lowlands and accessible shorelines. After the war and due to the expansion of Guam’s commercial economy, people tended to gravitate towards the north-central and northern areas of the island to be close to places of employment and the comforts of

urbanization. This trend has continued: in 1999, 46.89% of the total population resided in the north-central and northern regions of the island.

Village Distribution
1994-1999

	1994	1995	1996	1997	1998	1999
Agana Heights	4176	4204	4235	4277	4358	4441
Agat	5922	5962	6006	6065	6179	6298
Asan Maina	2190	2205	2221	2242	2285	2329
Barrigada	8628	8686	8751	8836	9003	9176
Chalan Pago-Ordot	5377	5413	5453	5506	5611	5718
Dededo	35893	36137	36405	36758	37454	38174
Hagatna	1361	1371	1381	1394	1421	1447
Inarajan	2992	3112	3035	3064	3122	3182
Mangilao	11581	11660	11746	11860	12084	12317
Merizo	2105	2119	2135	2156	2197	2239
Mongmong-Toto-Maite	6543	6587	6636	6700	6828	6958
Piti	2056	2070	2085	2105	2145	2187
Santa Rita	8403	8460	8523	8605	8769	8937
Sinajana	3187	3209	3233	3264	3326	3390
Talofofo	2776	2794	2815	2842	2895	2952
Tamuning	19640	19773	19919	20112	20493	20887
Umatac	1066	1073	1081	1092	1112	1134
Yigo	12648	12734	12829	12953	13199	13452
Yona	6344	6387	6434	6497	6620	6747
Total Population	142888	143856	144923	146328	149101	151965

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Dependency Ratio:

In a population with an unusually large number of children, calculating a dependency ratio becomes important. The dependency ratio is defined as the ratio of children aged 0-14 and persons 65 years or older to the persons between the ages 15 and 64. The Guam dependency ratio in 1999 was 67.8% overall, as only 59.6% of Guam's population are in the working ages of 15 to 64 years.

The implications of a dependency ratio are primarily economic, since the members of the community's formal work force must sustain the proportion of the population unable to provide for their needs.

Age Distribution:

Guam's population is young. Of the projected population for 1999, 42.27% of the population are under the age of 19 and 34.63% are under the age of 15. Over 8% of Guam's population is over the age of 60. The median age of the total population as calculated from the 1990 Census was 25 years old. The median age of the 1999 projected population is 26.2 years of age (males 27.6 and females 25.0 years of age).

**Age Distribution
1994-1999**

	1994	1995	1996	1997	1998	1999
<1	4335	4255	4145	4247	4199	4212
1-4	15180	15761	16097	16263	16509	16575
5-9	14151	14722	15465	16290	17357	18455
10-14	12480	12605	12714	12804	13027	13389
15-19	10827	10775	10884	11087	11445	11762
20-24	11207	10281	9627	9310	9394	9564
25-29	13565	12981	12177	11176	10300	9567
30-39	23861	23782	23675	23561	23644	23589
40-49	17100	17762	18358	18847	19372	19825
50-59	9571	9859	10238	1071	11302	11952
60+	10611	11073	11543	12032	12552	13075
Total	142888	143856	144923	146328	149101	151965

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Since birth rates have steadily declined from 31.0/ per 1,000 in 1994 to 26.6/ per 1,000 projected in 1999, the proportion of the population age 20 and below is likely to decline in the future. However, over the next decades there will still be a large demand for medical services as well as prevention and protection programs pertaining to maternal and child health.

Sex Distribution:

Guam has had, and continues to have a high sex ratio. Sex ratio is defined as the proportion of males to females. In 1999, the overall sex ratio was 1.08.

0-19	33,236 males	1.07
	30,933 females	
20-34	16,116 males	1.06
	15,086 females	
35-64	25,640 males	1.17
	21,801 females	
65+	4,486 males	1.01
	4,418 females	

Guam's consistently male dominated sex ratio is unusual when compared to the U.S. mainland where, after the age of 45, females usually outnumber males by a large margin.

1999 Civilian Population By Age and Sex

	# Males	% Of males	# Females	% Of females
0-4	10,907	13.68	9,880	13.66
5-9	9,686	12.15	8,769	12.13
10-14	6,867	8.61	6,522	9.02
15-19	5,936	7.45	5,826	8.05
20-24	4,407	5.53	5,157	7.13
25-29	4,757	5.97	4,810	6.65
30-34	6,963	8.73	5,121	7.08
35-39	6,155	7.72	5,350	7.40
40-44	5,674	7.12	4,846	6.70
45-49	5,061	6.35	4,244	5.87
50-54	3,944	4.95	3,205	4.43
55-59	2,661	3.35	2,142	2.96
60-64	2,165	2.71	2,006	2.77
65+	4,492	5.63	4,412	6.10
Total	79,675	52.42	72,290	47.57

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Top Ten Causes of Death:

As in other industrialized societies, the two most common causes of death in Guam are heart disease and cancer for males and females. Comparisons between males and females showed the remaining eight causes of death were different for each. For males, the third leading cause of death was unintentional injuries; while for females it was diabetes. The fourth and fifth leading cause of death for males were stroke and motor vehicle crashes. For females, they were pneumonia and stroke.

Top Ten Causes of Death by Sex Guam

Females			Males		
Cause of deaths	Number of deaths	Percent of deaths	Cause of deaths	Number of deaths	Percent of deaths
Heart disease	354	28.6	Heart Disease	468	24.2
Malignant Neoplasm	163	13.2	Malignant Neoplasm	304	15.7
Diabetes	108	8.7	All Other Accidents	136	7.0
Cerebrovascular Disease	98	7.9	Cerebrovascular Disease	125	6.5
Pneumonia	55	4.4	Suicide	113	5.8
Perinatal Disease	41	3.3	Motor Vehicle Crashes	100	5.2
Motor Vehicle Crashes	36	2.9	Diabetes	67	3.5
All Other Accidents	33	2.7	Chronic Liver Disease and Cirrhosis	59	3.1
Suicide	28	2.3	Pneumonia	55	2.8
ALS/PD	23	1.9	Homicide	45	2.3

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Life Expectancy:

The number of years expected in a population's lifetime often reflects the population's environment and is frequently used with other indicators to measure the population's health status.

**Life Expectancy by Sex - Guam
1994-1999**

	1994	1995	1996	1997	1998	1999
Males	71.86	73.41	73.92	74.7	75.2	75.36
Females	81.57	78.63	80.76	79.72	79.98	80.18

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Socio-Economic Status:

Per Capita Income:

Per Capita income is a useful indicator of money available to individuals and the relative wealth of a community. These resources may be used to purchase health services and to purchase indirect prevention-related goods and services including food and shelter.

**Per Capita Income
1994-1998**

1994	1995	1996	1997	1998
\$11,306	\$11,035	\$10,512	\$10,900	\$12,028

Source: Department of Labor

The Per Capita Income for 1998 was \$12,028, an increase of \$1,128 or 10.3% above the previous year. There has been a 6% increase from 1994 to 1998.

Household Income:

A household consists of all persons who occupy a house, an apartment, or other group of rooms, or a room that constitutes a housing unit. A group of rooms or a single room is regarded as a separate living quarters; that is, when the occupants do not live and eat with any other unit in the structure, and when there is either 1) direct access from the outside or through a common hall, or 2) a kitchen or cooking equipment for the exclusive use of the occupants.

In 1994, out of 25,558 households, surveyed by the Department of Labor, 3,371 or 13.1% reported an income of \$10,999 or less, and 10,369 households or 40.5% reported a household income of \$50,000 or more. In 1994, the mean household income was \$46,567.

In 1998, out of 38,994 households surveyed, 4,518 households or 11.5% reported an annual income of \$10,999 or less and 15,075 households or 38.6% reported an annual income of \$50,000 or more. The mean household income for 1998 was \$47,374.

Average hourly earnings for non-supervisory workers in the private sector increased from \$5.02 in December 1979 to \$7.18 in 1989 to \$9.90 in December 1999.

Total employment declined by 3,790 jobs in fiscal year 1999, and 1,220 in the first quarter of fiscal year 2000 (September through December 1999).

Private sector employment dropped by 940 jobs in the quarter September through December 1999. In fiscal year 1999, private sector employment decreased by 2,410 jobs. Construction industry jobs accounted for 730 of the 940 job losses and nearly a majority of the loss for the year – 1,150 of the 2,410 jobs. Federal employment declined by 80 jobs in the quarter September through December 1999 and by 330 jobs in fiscal year 1999. Government of Guam employment declined by 200 jobs in the last quarter and by 1,050 for the year.

A large segment of the population has been in need of public assistance, which is provided by the Department of Public Health and Social Services, Division of Public Welfare. Listed below are the number of people receiving assistance from particular programs from FY ' 1994 to FY' 1999. Many participated in several programs since assistance benefits are not mutually exclusive.

The growth of the island may be attributed to the influx of people from the Federated States of Micronesia (FSM). As a result of the Compacts of Free Association of 1985 between the United States Federal Government and the FSM and the Republic of the Marshall Islands and the Compact of Free Association of 1996 between the United States Federal Government and the Republic of Belau, citizens from FSM, Belau and the Marshall Islands are allowed to freely enter the United States and its insular areas.

**Division of Public Welfare
Statistical Fact Sheet**

	1994	1995	1996	1997	1998	1999
Public Assistance						
# Cases	3,346	3,691	3,742	3,796	3,328	3,704.
Recipients	8,955	9,951	10,234	9,944	9,223	
Payments	17,053,074	19,292,026	19,868,720	19,992,881	17,443,782	3,284,822
Food Stamp Program						
# Cases	4,996	5,443	5,554	5,609	5,011	
Recipients	15,456	16,708	17,277	17,783	16,550	
Allotments	22,171,163	24,684,837	26,276,656	25,723,415	26,022,223	
Medicaid						
Eligibles	8,284	9,989	11,100	14,050	13,511	10,634
Recipients	6,911	4,369	9,812	9,736	10,311	4,339
Payments	6,529,777	6,620,254	11,570,540	11,169,480	9,483,366.	1,949,712.
Carry Over		3,208,778	4,665,894	4,213,044	3,199,101	2.5.
MIP						
Eligibles	8,022	6,646	8,020	7,962	9,206	8,749
Recipients	6,133	4,220	6,158	6,732	8,508	3,901
Payments	15,841,738	15,164,083	17,378,625	13,582,865	17,536,815	5,103,475
Carry Over		9,035,434	8,897,940	4,883,110	4,802,112	

Source: Division of Public Welfare, Department of Public Health and Social Services
 ,10/98 11/98 only .FY 98 payments processed as of 9/30/98
 ,Payments processed as of 12/31. Includes FY98 carryovers
 , 2.5 million carryover for both MAP and MIP

**Division of Public Welfare
Compact Impact
Statistical Fact Sheet**

	1994	1995	1996	1997	1998	1999
Public Assistance						
# Cases	569	725	673	630		
Recipients	1,765	2,282	2,113	1,391		
Payments	3,330,816	4,402,464	4,162,284	3,392,460		
Food Stamp Program						
# Cases	584	721	735	684		
Recipients	1,195	1,480	1,568	1,497		
Medicaid						
Eligibles	1,668	2,090	2,341	2,925	2,256	1,246
Recipients	1,102	781	1,941	1,887	1,811	539
Payments	1,549,345	1,372,791	2,349,352	1,952,327	1,721,378	235,165
MIP						
Eligibles	1,046	1,145	1,290	1,430	1,691	1,593
Recipients	641	415	996	957	1,268	485
Payments	1,233,922	1,388,179	2,307,565	1,450,727	1,963,800	617,289

Source: Division of Public Welfare, Department of Public Health and Social Services
 NOTE: Compact Impact citizens do not meet citizenship criteria for the Food Stamp Program, and were never eligible for assistance. Only US-born children of Compact Impact citizens receive Food Stamp assistance if all other eligibility criteria were met.

The addition of the Micronesian population is extremely critical. The Micronesian immigrants are, for the most part, from areas with insufficient, if not completely nonexistent health infrastructures. They are in low-paying, entry-level jobs, and often do not have insurance. They do not qualify for Food Stamps, Public Assistance, or low-cost

housing assistance, but they may qualify for some medical assistance programs available at the Department of Public Health and Social Services.

Poverty:

Poverty is the single most powerful influencer of poor health among families. Children living in poverty are exposed more frequently to such adverse conditions as poor nutrition. Learning disabilities, otitis media and other infectious conditions are more common among poor families. Children living in families who are poor are more likely than children living in other families to have difficulty in school, to become teen parents and, as adults, to earn less and be unemployed more frequently. (Duncan G, and Brooks-Gunn, J. 1997)

In 1990, the population of Guam stood at 133,152 with an estimated 15% of the population in poverty.

On Guam, there were 19,989 families with 46,424 children under 18 in 1990 whose income was examined to determine poverty status. Of these children, 8,756 (18.9%) were living in families/households with income at or below poverty level.

In 1998, \$16,655 was the estimated income threshold for a family of 4 to be in poverty. Average household size on Guam in 1998 was 3.93 persons.

**Estimates of the Population in Poverty
1998- Guam**

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 16,655	910	3,576
Total	8,557	33,629

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

125% of Poverty - \$20,819

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,279	8,956
\$20,000 – 20,819	414	1,627
Total	10,340	40,636

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

200% of Poverty - \$33,310

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,749	10,804
\$20,000 – 20,819	5,056	19,870
\$20,000 – 33,310	1,412	5,549
Total	16,864	66,276

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Homeless:

Homelessness is prevalent throughout the world, even on Guam. The 1999 Guam homeless count revealed that 40 persons in families with children and 158 individuals were living in emergency shelter, transitional housing, and permanent housing programs. This count, however, did not include the homeless who were living on the streets, beaches, parks, cars, caves and other areas not meant for human habitation.

When adding these homeless to the number of homeless in shelters, the total was well over 200 people.

The Salvation Army conducted a point-in-time census of the homeless population on Guam on April 20, 2000. The following definition of homeless provided by the Department of Housing and Urban Development was used:

The term “homeless or homeless individual or homeless person” includes:

- (1) An individual who lacks a fixed, regular, and adequate nighttime residence; and
- (2) An individual who has a primary nighttime residence that is:
 - (a) A supervised publicly or privately operated shelter designed to provide temporary living accommodations (include welfare hotels, congregate shelter, and transitional housing for the mentally ill);
 - (b) An institution that provides a temporary residence for individuals intended to be institutionalized; or
 - (c) A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings.

Using the above definition, the following were included in the homeless count for Guam:

- Families and individuals in emergency shelters;
- Families and individuals in domestic violence shelters;
- Families and individuals in transitional housing shelters
- Individuals temporarily in shelters for persons with mental illness or developmental disabilities;
- Individuals in substance abuse shelters;
- Individuals in hospitals who are ready to be released but have no home to go to;
- Children in youth shelters
- Families and individuals in motels/hotels due to crisis;
- Families and individuals on the streets, beaches, caves, park areas, bus shelters, jungle areas;
- Families and individuals living in containers, abandoned buildings and homes not meant for human habitation.

Guam Homeless Count - 2000

	Number	Percentage
Gender		
Male	238	48.08%
Female	203	41.01%
Unknown	54	10.91%
Total	495	
Age		
Under 18	206	41.62%
19-25	39	7.88%
26-35	69	13.94%
36-45	76	15.35%
46-65	44	8.89%
65+	4	0.81%
Unknown	57	11.52%
Family Composition		
Individual Youth	18	5.92%
Single Men	101	33.22%
Single Women	37	12.17%
Single Parent Family	26	8.55%
Two Parent Family	31	10.20%
Adult Couple, No children	6	1.97%
Unknown	63	20.72%
Employment Status (adults)		
Unemployed	146	54.07%
Employed	40	14.81%
Unknown	84	31.11%

Source: Guam Housing and Urban Renewal Authority, Guam Homeless Count 2000

Families living in overcrowded conditions were not included in the count. However, this type of living arrangement is common in the municipalities due to the culture of families relying on one another for support. In addition, families and individuals who move around from family member to family member were not included. Again, this is fairly common.

Preventive and Primary Care Services for Pregnant Women, Mothers, and Infants

Infant Mortality:

The infant mortality rate is widely used as a measure of a community's health status. The infant mortality rate is made up of two components: neonatal mortality (death in the first 28 days of life) and postneonatal mortality (death after the first month but within the first year).

Infant mortality rates are usually calculated by dividing the number of infant deaths in a given year (obtained from death certificates) by the number of live births in the same year (obtained from birth certificates).

Infant Mortality Guam

	1994	1995	1996	1997	1998	1999
Infant mortality rate	9.49	9.07	8.91	8.80	7.87	8.67

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

The 1999 rate of 8.67 infant deaths per 1,000 live births was 10% higher than the 1998 rate of 7.87.

More than half of the infants die after the first month of life, in the postneonatal period, when infections, diarrhea, and respiratory illnesses such as influenza are the leading causes of death.

Neonatal Mortality:

More than half of the infant deaths occur in the first month of life. The leading causes of death in the neonatal period are congenital anomalies, respiratory distress syndrome, disorders relating to short gestation and effects of maternal complications.

There has been some improvement in some of the other factors associated with increased risk of newborn deaths such as the prevalence of congenital anomalies and the number of low birth weight infants.

Neonatal Mortality Guam

	1994	1995	1996	1997	1998	1999
Neonatal mortality rate	5.87	5.73	5.86	4.17	3.93	5.69

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Similar to the infant mortality rate, the neonatal mortality rate has increased. In 1999, the neonatal mortality rate was 5.69 per 1,000 live births.

Postneonatal Mortality:

The postneonatal mortality rate has been declining. The four leading causes of death in this period are Sudden Infant Syndrome (SIDS), congenital anomalies, injuries, and infections.

Postneonatal Mortality Guam

	1994	1995	1996	1997	1998	1999
Postneonatal mortality rate	3.61	3.34	3.05	4.63	3.93	2.97

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Postneonatal mortality declined by over 24% between 1998 and 1999.

Fetal Death:

Fetal death is associated with pregnancies complicated by maternal factors such as Rh sensitization, diabetes, and complications of pregnancy such as problems with amniotic fluid levels. Fetal mortality rates also are high when birth defects, such as anencephalus, renal agenesis and hydrocephalus, are present.

Fetal Deaths Guam

	1994	1995	1996	1997	1998	1999
Fetal Death rate	12.27	9.22	10.44	15.73	12.11	11.50

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

The fetal death rate has declined to 11.51 per 1,000, from a high of 12.11. There were 47 fetal deaths in 1999.

Maternal Mortality:

According to the World Health Organization (WHO), a maternal death is defined as “the deaths of a women while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.”

**Maternal Deaths
Guam**

	1994	1995	1996	1997	1998	1999
Maternal Death	1	0	0	1	0	Not available

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Crude Birth Rate:

This measure divides the number of live births in a population in a given period by the resident population.

**Crude Birth Rate
Guam**

	1994	1995	1996	1997	1998	1999
Population	142,888	143,856	144,923	146,328	149,178	151,965
Guam Births	4,427	4,189	4,265	4,318	4,322	4,039
Crude Birth rate	31.0	29.1	29.4	29.5	29.0	26.6

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Guam’s high crude birth rate may be attributed to the high number of women in the childbearing age of 15-44. In 1998, 31,057 (43.78%) women were within the childbearing age bracket. However, the overall birth rate has been declining slowly since 1994.

Fertility Rate:

The fertility rate, which relates to births to the number of women in the childbearing ages, was 129.83 births per 1,000 women aged 15-44 years in 1999. It has gradually declined since 1994, though still twice as high as the U.S. fertility rate.

Fertility Rate Guam

	1994	1995	1996	1997	1998	1999
Female Population 15-44	33,388	33,708	34,025	31,026	31,057	31,110
Total Live Births	4,427	4,190	4,265	4,316	4,322	4,039
Fertility Rate	136.4	130.5	135.3	139.2	139.2	129.8

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Age Specific Fertility Rates Guam

	1994	1995	1996	1997	1998	1999
10-14	2.45	0.65	0.64	1.28	1.10	0.92
15-19	110.05	90.27	95.24	86.26	89.62	78.96
20-24	245.52	228.34	239.77	241.70	238.83	223.00
25-29	208.28	200.78	226.64	247.61	256.29	239.09
30-34	144.01	142.61	148.71	156.65	160.85	158.37
35-39	57.25	79.73	69.56	77.17	74.10	68.60
40-44	15.98	19.56	18.97	22.60	17.18	17.95
45+	0.26	0.37	0.36	0.69	0.87	0.31
General Fertility Rate	136.37	130.52	135.27	139.26	139.18	129.83
Total Fertility Rate	3.92	3.81	4.00	4.17	4.19	3.94

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Illegitimate Birth:

Guam's illegitimate birth rate of 55.4 is higher than the United States rate of 44.3 per 1,000 women. This may be explained by a changing social environment in which more women are opting for single parenthood, and social attitudes have become more accepting of this choice.

Illegitimate Birth Guam

	1994	1995	1996	1997	1998	1999
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,039
Illegitimate	2,089	1,966	2,072	2,153	2,345	2,236
% Illegitimate	47.2	46.9	48.6	49.9	54.3	55.4

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Low Birth Weight and Very Low Birth Weight:

Low birth weight is the factor most closely associated with neonatal mortality. Low birth weight infants are more likely to experience long-term disabilities or to die during the first year of life than are infants of normal weight.

Very low birth weight infants who survive are at significantly increased risk of severe problems, including physical and visual difficulties, developmental delays and cognitive impairment requiring increased levels of medical, educational, and parental care.

Live Births by Weight Guam

	1994	1995	1996	1997	1998	1999
1lb 1oz- under	1	5	2	0	2	2
1lb 2oz – 2lb 3oz	11	14	12	9	10	11
2lb 4oz- 3 lb 4oz	18	22	20	25	19	15
3lb 5 oz – 4 lb 6 oz	43	53	57	55	69	64
4lb 7oz – 5 lb 8 oz	211	231	216	219	228	227
Total Low birth weight	284	325	307	308	328	319
Total Very low birth weight	30	41	34	34	31	28
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,039

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

A number of risk factors for low birth weight have been identified including younger and older maternal age, high parity, poor reproductive history, low socio-economic status, low levels of education, late entry into prenatal care, smoking and substance abuse.

Smoking:

Smoking has been linked to low birth weight. The risk of miscarriage, stillbirth, and neonatal death increases directly with increased levels of smoking during pregnancy.

Drugs and Alcohol:

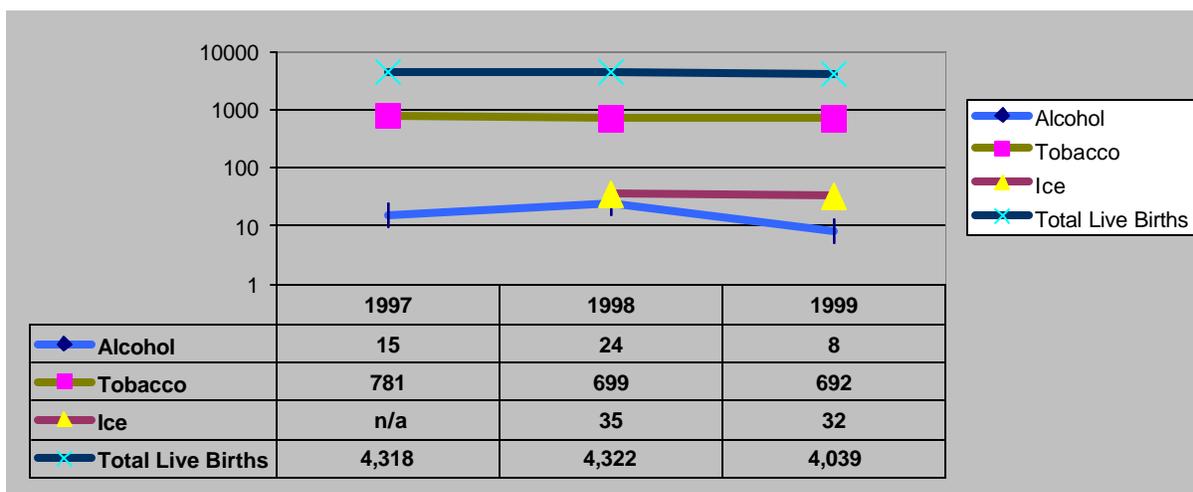
Alcohol use during pregnancy has been identified as the leading preventable cause of birth defects. Fetal Alcohol Syndrome (FAS) is a set of birth defects characterized by abnormal features to the face and head, growth retardation and central nervous system abnormalities often reflected in mental retardation.

Pregnant women who are drug abusers often have a higher incidence of chronic infections, poor nutrition, anemia and lack adequate prenatal care. Usage of drugs in pregnancy can result in babies who suffer from drug withdrawal after birth.

The use of Crystal Methamphetamine “ice” has increased to epidemic proportions. This drug was first introduced to the island in 1990 and has become a drug of preference. There are 3 main reasons for its popularity: 1) it is easily available and accessible; 2) users get a “high” that can last 12 to 14 hours from one “hit”; and 3) the price of the drug is cheaper than heroin and cocaine.

Despite the increased focus on intervention, many pregnant women do not receive the help they need. Reasons for not receiving treatment may include ignorance, poverty, lack of available services and fear of criminal prosecution, which may lead, addicted women to conceal their drug usage from medical providers and further jeopardize the pregnancy outcome.

Live Births by Alcohol, Tobacco and Ice Usage of Mother



Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Prenatal Care:

Although starting prenatal care as early as possible during a pregnancy is believed to foster the most healthful birth outcome for both mother and infant, sizable shares of mothers-to-be do not initiate prenatal care in the first trimester.

Birth By Prenatal Care of Mother Guam

	1994	1995	1996	1997	1998	1999
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,039
1 st Trimester	66%	69%	66%	69%	62.65%	62.0%
2 nd Trimester	25.5%	21%	23%	25%	23.90%	24.1%
3 rd Trimester	4%	4%	5%	4.9%	8.60%	5.0%
No PN Care	4%	5%	6%	0.6%	4.72%	8.9%
Unknown	0	1%	2%	9%	.11%	.27%

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The proportion of women reporting no prenatal care in 1999 increased by over 88% from 1998, while the percent of women beginning care in the third trimester decreased by nearly 42%. The proportion of women seeking care in the first trimester continues to decline.

Cesarean Delivery:

Cesarean delivery is an ancient obstetric operation that historically was performed mainly for maternal complications such as obstructed labor, maternal diabetes, severe hemorrhage or toxemia. In recent years, the procedure has been performed more frequently for fetal indications. Other indications, such as dystocia, fetal distress and breech presentation also contribute to cesarean delivery.

Cesarean Delivery Guam

	1994		1995		1996		1997		1998		1999	
	Pri	Rept	Pri	Rept	Pri	Rept	Pri	Rept	Pri	Rept	Pri	Rept
Under 15	0	1	0	0	0	0	1	0	1	0	0	0
15-19	51	7	39	7	55	7	43	12	42	2	45	7
20-24	158	64	108	41	105	43	115	42	93	38	112	50
25-29	134	92	101	51	117	62	106	66	104	85	107	63
30-34	101	89	80	59	96	51	82	67	68	80	84	78
35-39	32	40	57	42	48	33	63	39	47	40	43	57
40-44	10	11	15	10	12	11	15	11	22	8	18	10
45-49	0	0	1	0	0	0	0	0	2	2	1	1
50+	0	0	0	0	0	0	1	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
Undefined	0	1	0	0	0	0	0	0	0	0	2	1
Total	486	305	401	210	433	207	426	237	379	255	412	267
% of Births	10.97	6.88	9.57	5.01	10.15	4.85	9.86	5.48	8.76	5.90	10.20	6.61
Total Live Births	4427		4189		4265		4318		4322		4039	

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Abortion:

Abortion has been legal throughout the United States since 1973, when the Supreme Court ruled in *Roe v. Wade* that a women's constitutional right to privacy included her right to terminate a pregnancy.

Abortion is a highly controversial and divisive issue. It is legal, widely utilized and highly stigmatized. In the United States, the stigma attached to abortion often results in the problem of underreporting the event.

Abortion Report Guam

	1997	1998
Younger than 13	0	1
13-17 years	5	6
18-22 years	15	21
23-27 years	12	8
28-32 Years	9	13
33-37 years	4	8
38 and older	0	0
Age Unknown	0	1
Total	45	58

Source: Guam Memorial Hospital Authority, Office of Medical Records

The strongest available evidence concerning unintended pregnancies comes from the abortion report. In particular, the abortion ratio – the number of intentional terminations per thousand live births – reflects intent to carry a pregnancy to term.

Contraception Methods:

Family planning remains a foundation in attaining the national goal aimed at achieving planned, wanted pregnancy and preventing unwanted pregnancies. One important determinant of pregnancy and birth rates is contraceptive use.

The oral pill, administered daily, is the most popular. Other hormonal methods include implants and injectables. Norplant is a subdermal implant consisting of six flexible, closed capsules that are implanted beneath the skin of the upper arm. The injectable (Depo-Provera) requires the user to return for an injection every three months.

Barrier methods include the male condom, female condom, spermicide, diaphragm, and cervical cap. The main benefits of barrier methods include accessibility, availability, affordability, immediate effectiveness, and protection against sexually transmitted diseases.

Family Planning Users

	1996	1997	1998	1999
Sterilization	49	37	32	55
Oral Contraceptives	851	734	544	360
IUD	7	2	0	3
Hormone Implants	3	3	3	3
Injection	1,029	895	442	518
Cervical Cap	0	0	0	0
Diaphragm	1	0	0	0
Condom	149	230	592	199
Spermicidal	21	39	35	5
Natural Methods	208	173	162	8
Other Methods	160	106	0	620
Method Unknown	7	29	239	19
Pregnant	23	309	401	545
No Method	36	742	105	440
Total	2,544	3,299	2,555	2,775

Source: Department of Public Health & Social Services, Guam Family Planning Project

Sexually Transmitted Diseases (STDs):

Sexually Transmitted Diseases (STDs) refers to the more than 25 infectious organisms transmitted primarily through sexual activity. STDs cause many harmful, often irreversible, and costly complications, such as reproductive health problems, fetal and perinatal health problems.

As with many other diseases, poverty, lack of education, drug usage and social inequity are often linked to STD rates. There is a particular subpopulation that is at high risk for STDs – sex workers, adolescents, homeless and adults in detention. Furthermore, the secrecy with which sexuality is treated in society often hinders the effectiveness of sexuality education for adolescents, communication between sex partners, mass media messages and preventive clinical services.

Chlamydia:

Since the 1970's, Chlamydia Trachomatis infections have replaced Gonorrhea to become the leading sexually transmitted bacterial infection. Although men and children

are affected, women risk serious acute and long-term reproductive sequelae from Chlamydia infections.

Failure to control the spread of Chlamydia infection maybe due to several factors. Many cases go unidentified because many infected persons, particularly women, are asymptomatic.

Gonorrhea & Syphilis:

Women who are infected with Gonorrhea are often unaware of the disease and thus, do not seek treatment. Infants delivered to women with gonorrhea may develop eye infections that can lead to blindness. Syphilis is the first sexually transmitted disease for which control measures were developed and treated.

**Sexually Transmitted Diseases
Guam**

	1994	1995	1996	1997	1998	1999
AIDS	11	2	8	5	8	8
Chlamydia	374	520	355	394	432	468
Gonorrhea	131	96	63	45	73	55
Hepatitis B	5	5	1	3	2	4
Hepatitis C	0	7	5	2	1	1
Herpes Type 2	24	8	19	18	17	8
HIV	9	12	8	11	16	10
Syphilis	5	8	3	4	5	1
Total	559	658	462	482	554	555

Source: Department of Public Health & Social Services, Office of Epidemiology and Research

HIV/AIDS:

The most important measure of progress in controlling the AIDS epidemic is the annual incidence of HIV infection. However, because there is no mandatory testing for HIV infection, it is difficult to estimate the seroprevalence of HIV in the general population.

Although HIV infection is preventable, the changes in behavior that are needed to prevent infection have not been easily achieved.

Incidence rates for HIV and AIDS have increased annually for the fifteen years they have been under surveillance on Guam. During the period, 131 cases of HIV have been reported, for an average total incidence of 97.83 cases per 100,000 population. Males had an average incidence over this time period of 148.12 per 100,000, while females had an average incidence of 31.88 cases per 100,000. The risk of HIV infection for males was nearly five times higher than for females. Over 45% of those with HIV developed AIDS between 1985 and 1999, for an average incidence of 43.99 cases per 100,000 population. Males developed AIDS at a rate of 72.71 per 100,000, nearly ten times the rate of females (7.59 per 100,000).

	1985-1999		1996		1997		1998		1999	
	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS
Sex										
Male	110	54	11	9	7	4	13	6	8	7
Female	21	5	4	1	3	1	2	0	2	1
Rate per 100,000										
Male	148.12	72.71	14.50	11.87	9.12	5.21	16.63	7.67	10.04	8.79
Female	31.88	7.59	5.79	1.45	4.31	1.44	2.82	0.00	2.77	1.38

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

** 1999 had Guam's first Pediatric HIV case (3 year old male)

With the increased number of Guam residents including the Freely Associated States of Micronesian (FAS) and Marshall Island citizens who are HIV infected, there is a critical need to develop a Pacific Island Approach to address HIV/AIDS care due to the following scenarios:

- In 1999, 2 Freely Associated States of Micronesia (FAS) couples tested HIV positive and left Guam for Hawaii to seek medical and health care services.
- In January 2000, assistance was requested for a pregnant FAS mother and spouse residing in the FAS islands. Health care, drug therapy and hospitalization upon delivery was requested. The couple were residents of Guam but moved back to their home island to seek traditional medicine.
- A person living with AIDS (PLWHA) mother with a PLWHA child (under the age of 5) sought traditional medicine in the outer islands. Mother died in FAS Island leaving the child on Guam.

Cancer:

Cancer is the second leading cause of death for women in the United States (National Center for Health Statistics). During 1999, over a million people in the United States were diagnosed with cancer, and over 500,000 persons were expected to die from cancer.

Cancer is the second leading cause of death on Guam, accounting for 718 (14.5%) of 4,939 deaths between 1991-1998. An average of 90 persons die annually of this disease, with a mean mortality of 62.6 per 100,000 people (non-age adjusted). In 1998, there was a 5.3% increase (from 56.7 to 59.7) as compared to the previous five year mean death rate though the past two years (1997-1998) have shown a reduction from 1996's high mortality.

**Cancer Mortality – Guam
1994-1998 Deaths**

	# of cancer deaths	Cancer as % of deaths	Total deaths	Total population	Cancer Mortality rate per 100,000
1994	88	14.0	628	142,888	61.6
1995	100	16.0	626	143,856	69.5
1996	107	17.1	627	144,923	73.8
1997	83	13.0	639	146,328	56.7
1998	89	13.7	651	149,101	59.7
Total	377	11.89	3,171		52.03

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Breast Cancer:

Breast cancer is an important health issue for women because of its negative impact on not only survival, but also life-style, self-image and quality of life.

The risks of breast cancer increase with age, and the rise is particularly notable after age 40. It is also found more often among women with a personal or family history of breast cancer, women who have never had children and whose first birth was after age 30.

Cervical Cancer:

Cervical cancer is the 10th most common cancer among females in the United States, with more than 12,000 new cases found in 1999. Cervical cancer accounts for about 1.8% of cancer deaths among females.

The principal risk factors for cervical cancer involve sexual behaviors. Early age at first intercourse and multiple sexual partners are associated with an increased risk.

The rate of deaths has declined due to the usage of the Pap test. The decrease is also due to the fact that more women are having regular gynecologic examinations.

Female Cancer by Site

	1995	1996	1997	1998	1999	TOTAL
Breast	28	35	16	23	30	132
Female Genitals	1	0	1	0	0	2
Cervix Uteri	0	8	4	3	3	18
Corpus Uteri	0	3	2	1	6	12
Uterus	6	3	2	0	1	12
Ovary	3	3	3	3	4	16
Total	38	52	28	30	44	192

Source: Department of Public Health & Social Services, Office of Epidemiology and Research

Violence:

Both females and males experience family and intimate violence and sexual assault. Perpetrators can be the same or opposite sex. Male victimization of females is more common in intimate partner violence and sexual assault.

The National Crime Survey may drastically underreport injuries resulting from abuse of women because abused women frequently fear reprisals if outsiders are informed and they do not generally regard these events as crimes.

Family Violence:

Studies suggest that between 4 to 5 million women are physically battered each year by partners including husbands, former husbands, boyfriends, and lovers.

Although there have been considerable research efforts directed at identifying specific demographic factors that are associated with women battering, accurate data are difficult to obtain. It is clear that battering of women occurs at all levels of society. Battering appears to be more common at lower levels of the socioeconomic scale but this simply may be a reflection of the availability of resources of middle and upper class families to keep their violence from coming to public attention.

The Uniform Crime Report for calendar Year 1998 reported 2,197 offenses involving domestic violence. Of the 2,197 offenses, there were 1,803 victims. Of the 1,803 victims, 371 (21%) were males and 1,432 (79%) were females. Furthermore, there were 1,879 cases involving offenses committed against a family member. Of these cases, the most common relationship between the offender to the victim was that involving a spouse.

Relationship of Suspects/Offenders to Victims Calendar Year 1998

Suspects/Offenders	Number of Offense Cases	Percentage of Total
Spouse/Common Law Spouse	714	38.00%
Ex-Spouse/Ex- Common Law	266	14.16%

Spouse		
Boyfriend/Girlfriend	353	18.79%
Ex- Boyfriend/Girlfriend	135	7.18%
Family and Siblings	411	21.87%
TOTAL	1,879	100.00%

Source: Guam Police Department, Uniform Crime Report 1998

Incidences of family violence involving children have escalated over the past year. In 1998, there were 1,643 family violence cases, a 19% increase over the reported 1,386 family violence incidents of 1997. The number of children involved in family violence incidents has mushroomed 58% from 835 in 1997 to 1,317 in 1998.

Family Violence Incidents* Calendar Year 1997 & 1998

	1997	1998	Percent Change
			1997 vs. 1998
Number of Family Violence Cases	1,386	1,643	19%
Number of Children Involved	835	1,317	58%

Source: Guam Legal Services, 1997 and 1998 Annual Report

* Numbers reflect cases reported to the Guam Police Department, Guam Legal Services Corporation, Public Defender Services Corporation and other service providers serving victims of family violence.

Criminal Sexual Conduct/Rape:

The rate of attempted and completed rape is difficult to measure accurately because only about half the victims contact law enforcement officials to report the crime.

Guam has been experiencing an increase in the number of reported criminal sexual assault cases (CSC). Drugs and alcohol plays an important role in some of the CSC cases. In 1994, there were 227 CSC cases, 23% were drug and alcohol related. In 1995 there 202 CSC cases, 41% were drug and alcohol related. In 1996, 32% of the 342 CSC cases were alcohol and drug related. In 1997, 30% of the 212 CSC cases were drug and alcohol related and in 1998, of the 229 criminal sexual conduct cases reported, 29% were drug and alcohol related.

Criminal Sexual Conduct Calendar Year 1994 - 1998

	1994	1995	1996	1997	1998	Percent Change	
						98 vs. 97	98 vs. 94
Rape	109	112	168	86	87	1.16	-20.18
Sexual Conduct	118	90	174	126	142	12.70	20.34
Total Criminal Sexual	227	202	342	212	229	8.02	0.88

Conduct							
Alcohol/Drug Related	52	83	111	64	67	4.69	28.85
Alcohol/Drug Related	23%	41%	32%	30%	29%		

Source: Guam Police Department, Uniform Crime Report 1998

Access to the Health Care System:

Access to health care has been defined as a measure of the “potential and actual entry of a given population group into the health care delivery system”. (Aday, L.A., Fleming G.V., Anderson R. 1997)

Most women obtain health care services from a wide variety of sources, and they frequently enter the health care system for either pregnancy related services or pregnancy prevention.

There are many unique characteristics that impact access to health care services on Guam. First are cultural factors that impede access to health care. Many Chamorros, Filipinos, and Micronesians prefer traditional healers for medical care. Chamorros often visit “suruhanos” who use plant remedies and massage. Moreover, despite numerous educational interventions, people from various ethnic groups still do not believe or choose not to follow the advice of health professionals. In fact, they fear medical intervention.

Utilization:

Women use health services more frequently than men, but based on existing data it is unclear as to whether this is a result of greater illness, perceived need or availability of services.

The following responses are from the Behavioral Risk Factor Surveillance System. This is a population-based questionnaire that is conducted every month by telephone on Guam, using a random dialing system.

Last Visited a Doctor for a Routine Checkup

Response	1996		1997		1999	
	Number	Percent	Number	Percent	Number	Percent
Within the past year	618	73.8	156	83.0	228	76.8
Within past 2 years	131	15.7	19	10.1	36	12.1
Within the past 5 years	45	5.4	5	2.7	13	4.4
5 or more years ago	21	2.5	1	0.5	12	4.0
Don't know/not sure	17	2.0	4	2.1	5	1.7
Never	5	0.6	2	1.1	3	1.0
Refused to answer	0	0.0	1	0.5	0	0.0
Total	837	100.0	188	100.00	297	100.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Ever Had a Mammogram

Response	1996		1997		1999	
	Number	Percent	Number	Percent	Number	Percent
Yes	355	42.4	88	46.8	122	41.1
No	476	56.9	99	52.7	175	58.9
Don't Know	2	0.2	0	0.0	0	0.0
Refused	4	0.5	1	0.5	0	0.0
Total	837	100.00	188	100.00	297	100.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Ever Had a Pap Test

Response	1996		1997		1999	
	Number	Percent	Number	Percent	Number	Percent
Yes	723	86.4	170	90.4	252	84.8
No	104	12.4	17	9.0	44	14.8
Don't Know	5	0.6	0	0.0	1	0.3
Refused	5	0.6	1	0.5	0	0.0
Total	837	100.00	188	100.00	297	100.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Perception of Health Status:

In addition to utilization of health care services, a women's perception of her health status has been identified as an important factor contributing to women's overall access to health care.

Perception of Health Status

Response	1996		1997		1999	
	Number	Percent	Number	Percent	Number	Percent
Excellent	161	19.2	25	13.3	63	21.2
Very Good	196	23.4	34	18.1	73	24.6
Good	330	39.4	84	44.7	121	40.7
Fair	121	14.5	38	20.2	31	10.4
Poor	19	2.3	4	2.1	7	2.4
Don't Know	10	1.2	3	1.6	2	0.7
Total	837	100.00	188	100.0	297	100.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Financial Access to Health Care:

Measures of insurance status, like measures of utilization and perception of health status, are an important indicator of access of health care services.

Health Care Coverage

Response	1996		1997		1999	
	Number	Percent	Number	Percent	Number	Percent
Insured	730	87.2	170	90.4	258	86.9
Uninsured	101	12.1	18	9.6	39	13.1
Don't Know	6	0.7	0	0.0	0	0.0
Total	837	100.0	188	100.00	297	100.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Age Distribution:

Although few health problems are unique to particular age groups, many are more common at one stage of childhood than at another. For example, infants suffer primarily from the ill effects of pregnancy-related problems and young children tend to be victims of accidents and suffer from diseases contracted in-utero (e.g., AIDS) or certain leukemias, while adolescents tend to experience problems (such as pregnancy, drug dependency and motor vehicle accidents) that are the result of risk-taking behaviors.

**Age Distribution
1994-1999**

	1994	1995	1996	1997	1998	1999
<1	4,335	4,255	4,145	4,247	4,199	4,212
1-4	15,180	15,761	16,097	16,263	16,509	16,575
5-9	14,151	14,722	15,465	16,290	17,357	18,455
10-14	12,480	12,605	12,714	12,804	13,027	13,389
15-19	10,827	10,775	10,884	11,087	11,445	11,762
Total	56,973	58,118	59,305	60,691	62,537	64,393

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Child Mortality:

Death resulting from injury is one of the most profound public health issues facing children in the United States today.

The death of young adolescents, older adolescents and young adults are more likely to be due to external causes than to congenital diseases.

**Age Specific Deaths
1994 - 1998**

Age	1994	1995	1996	1997	1998	5 year total
< 1	42	38	38	38	37	193
1 - 4	10	6	6	6	9	37
5 - 9	6	4	8	2	12	32
10 - 14	6	7	4	2	9	28
15 - 19	10	9	9	11	11	50
20 - 21	8	5	7	12	9	41
Total	82	69	72	71	87	381

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

**Age Specific Death Rate
1994 – 1998**

Age	1994	1995	1996	1997	1998
< 1	9.689	8.931	9.168	8.712	8.651
1 – 4	0.659	0.381	0.373	0.369	0.545
5 – 9	0.424	0.272	0.517	0.123	0.691
10 – 14	0.481	0.555	0.315	0.156	.0691
15 – 19	0.924	0.835	0.827	0.992	0.961
20 – 21	1.927	1.246	1.796	3.108	2.277
Total	1.342	1.111	1.139	1.084	1.307

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Leading Causes of Death

Less than One Year Old

Cause	1994	1995	1996	1997	1998	5-yr total
Perinatal Conditions	16	16	21	13	10	76
Congenital Anomalies	11	5	3	8	5	32
Pneumonia	3	1	1	1	2	8
All Other Accidents	1	1	1	0	0	3
All other causes	11	15	12	16	10	193
Total	42	38	38	38	27	312

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

1-4 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
All Other Accidents	2	2	2	0	3	9
Congenital Anomalies	0	1	3	2	1	7
Motor Vehicle Accidents	1	2	0	0	0	3
All other causes	7	1	1	4	5	37
Total	10	6	6	6	9	56

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

5-9 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
All Other Accidents	2	2	2	1	0	7
Motor Vehicle Accidents	1	0	1	0	2	4
Malig. Neoplasm	0	1	3	0	0	4
All other causes	3	1	2	1	5	32
Total	6	4	8	2	7	47

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

10-14 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
Motor Vehicle Accidents	1	0	0	1	4	6
All Other Accidents	1	2	3	0	0	6
Suicide	2	1	0	0	2	5
Total	4	3	3	1	6	17

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

15-19 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
Motor Vehicle Accidents	3	2	2	3	5	15
Suicide	2	2	4	4	3	15
Accidents	2	3	2	2	0	9
Total	7	7	8	9	8	39

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

20-21 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
Motor Vehicle Accidents	1	2	2	2	4	11
Suicide	2	0	1	1	5	9
Homicide	2	0	0	1	0	3
Heart Disease	1	1	1	0	0	3
Total	6	3	4	4	9	26

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Vaccine Preventable Communicable Diseases:

The most effective way of preventing disease is by immunization. Adequate immunization protects children against several diseases that kill or disable many children in past decades. Despite the progress that has been made, infectious diseases remain an important cause of illness and death.

**Incidence of Vaccine Preventable Diseases
Children less than 1 year through age 19**

	1994	1995	1996	1997	1998	1999
Chickenpox	477	752	199	341	289	201
Haemophilus	0	0	0	0	0	0
Hepatitis B	1	2	0	0	0	0
Measles	189	0	0	0	0	0
Mumps	4	3	9	0	4	3
Pertussis	2	1	0	9	1	3
Rubella	1	1	0	0	0	0

Source: Department of Public Health & Social Services, Office of Epidemiology and Research

Asthma:

Access to and utilization of appropriate medical care can prevent severe episodes of asthma in many cases. Asthma is one of the most common chronic diseases in childhood, and is generally managed via outpatient care. Hospitalization for asthma may indicate that the child has not had adequate outpatient management for the disease.

The data presented is based on discharges and not the number of patients. Numbers shown can represent multiple visits for the same patients.

**Guam Memorial Hospital Authority
Discharge Data
Calendar Year 1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age							
Asthma w/o status	204	144	197	1.36	60	195	3.25
Asthma w status	5	5	10	2.0	0	0	.00
Total	209	149			60		

Age Group 1-9 years of age							
Asthma w/o status	610	513	572	1.11	97	131	1.35
Asthma w status	18	18	43	2.38	0	0	.00
Total	628	531			97		
Age Group 10-19 years of age							
Asthma w/o status	187	159	162	1.01	28	35	1.25
Asthma w status	9	9	25	2.77	0	0	.00
Total	196	168			28		
Total Hospital Discharges Asthma	1,033						

Source: Guam Memorial Hospital Authority Medical Records Section

Dental Services:

Access to oral health care is a significant problem for low-income children. Vulnerable children are more likely than children are in general to have dental problems, including extensive tooth decay, pain, and infection. These problems can lead to eating, learning, and speech problems and are the cause of millions of lost school hours.

School Busing Dental Services

	FY 1997	FY 1998	FY 1999
Educational Services	12,334	12,201	12,279
Dental Sealants	36,337	36,040	31,553
% of children with caries on permanent teeth	31.1%	30.7%	32.1%
% of children with caries on deciduous teeth grades 1-4	39.4%	39.6%	39.2%

Source: Department of Public Health & Social Services, Dental Health Service

Federal law established a minimum benefit package that must be available to all children and adolescents who are eligible for Medicaid. This federally mandated Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program includes periodic comprehensive physical and mental health assessments that must be provided in accordance with a schedule developed by states in consultation with professional child

health organizations. Under Medicaid EPSDT, states are required to provide a comprehensive range of early detection and prevention services that includes health assessment, screening and support services; comprehensive acute and chronic care; medical, dental, vision, hearing and well-child check up; immunizations; lab tests and health education. EPSDT requires states to provide children and adolescents with services that are “medically necessary” in order to treat physical and/or mental conditions identified through EPDST screenings.

Annual EPSDT Participation Report

	1996					1997					1998				
	Tot	<1	1-5	6-14	15-20	Tot	<1	1-5	6-14	15-20	Tot	<1	1-5	6-14	15-20
No of individuals eligible for EPDST	5853	482	2555	2318	498	5282	524	2612	1655	409	4018	585	2172	986	275
No. of eligible Who should receive at least 1 initial. Or Periodic screening	2842	482	1559	672	129	5282	524	679	198	44	4018	585	1347	296	69
No. of eligible receiving at least 1 initial. Or Periodic screening	1289	95	499	630	65	1569	128	882	487	72	1068	160	672	200	36
Expected no. of initial and periodic screening services	3199	839	1559	672	129	5282	1351	679	198	447	4018	983	1347	296	69
Actual no. of initial and periodic screening services	1289	95	499	630	65	1569	128	882	487	72	1068	160	672	200	36
No. of eligible referred for correct. Treatment	69	0	0	69	0	43	1	9	30	3	40	0	6	27	7
No. of Eligibles receiving vision assessments	253	0	121	111	21	311	0	120	159	32	293	0	111	159	23
No. of Eligibles receiving dental assessments	146	1	106	36	3	433	1	282	104	46	426	0	330	74	22
No. of Eligibles receiving hearing assessments	146	0	53	88	5	25	1	8	15	1	14	0	5	9	0
Total no. of Eligibles enrolled in continuing care arrangements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Department of Public Health & Social Services, Division of Public Welfare

Child Abuse and Neglect:

The vast majority of parents take great delight in their children, watching them develop and helping them learn. But almost all parents, at one time or another, have experienced intense frustration and anger, and can understand the impulse to hit or otherwise abuse a child.

Most parents do not actually lapse into such behaviors, but an estimated 1,000,000 parents each year do in fact abuse or neglect a child according to the National Center for Child Abuse and Neglect.

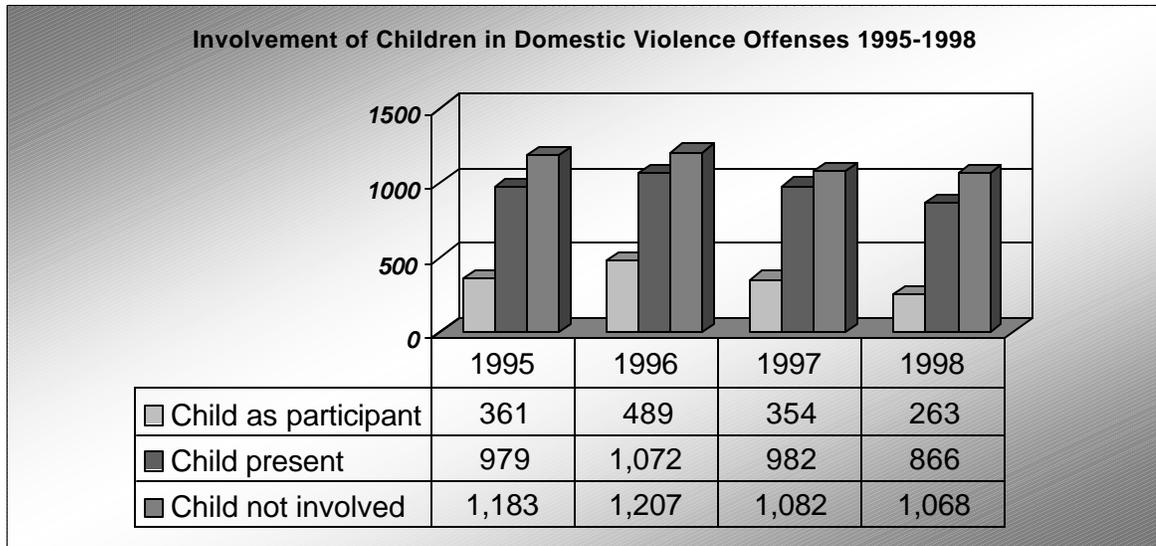
Physical abuse accounted for the greatest proportion (22.71%) of reported incidents, followed by physical neglect (19.11%), sexual abuse (7.74%) and emotional abuse (7.60%).

Reported Child Maltreatment Incidents

	1995	1996	1997	1998	1999
Physical abuse	711	334	522	571	813
Physical neglect	391	182	399	554	701
Emotional abuse	261	123	103	170	279
Emotional neglect	67	39	80	62	50
Sexual abuse	391	306	260	192	284
Medical neglect	170	51	139	225	227
Educational neglect	201	41	143	149	218
Lack of supervision	106	33	29	71	150
Abandonment	110	21	62	108	63
Unknown	0	0	0	0	0
Other	514	200	410	498	882
Total	2,922	1,330	2,147	2,600	3,667

Source: Department of Public Health & Social Services, Child Protective Services

The support and commitment of the public is crucial to sustaining an effective response to child abuse and neglect. In earlier periods of history of child protection, concerned individuals and organizations stood behind an organized community response to protect children. Now public support is needed to build the consensus necessary to intervene in family life, and to generate community support that strengthens parenting and the protection of children.



Source: Uniform Crime Report, Guam Police Department 1998

Unintentional Injury:

Children are primarily at risk of unintentional injuries and injury-related death from: motor vehicle injury that includes children as occupants, drowning, fire, burns, and falls.

On Guam, “accidents” are the leading cause of death and disability for children aged 1-9. Injuries are not caused by random acts or chance events; they are predictable and preventable.

The data presented is based on discharges and not the number of patients. Numbers shown can represent multiple visits for the same patients.

Motor Vehicle Accidents:

Seat belts and other retention devices, when used properly, have proven highly effective in preventing fatalities and serious injuries among children and adults.

Hospital Discharge Data Motor Vehicle Accidents 1999

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age Motor Vehicle “Accidents”	5	0	0	0	5	0	1.00

Age Group 1-9 years of age Motor Vehicle "Accidents"	65	0	0	0	65	0	1.21
Age Group 10-19 years of age Motor Vehicle "Accidents"	157	0	0	0	157	0	1.59

Source: Guam Memorial Hospital Authority Medical Records Section

Choking/Suffocation:

Most suffocation fatalities occur when children choke on small round objects. Other child suffocation deaths typically are caused by such objects as plastic bags, bedclothes, the sides of cribs and playpens, safety gates and entrapments in refrigerators and other appliance.

**Hospital Discharge Data
Choking/Suffocation
1999**

	TOTAL PATIENTS	TOTAL DX AS PRIMARY	DAYS AS PRIMARY DX	AVERAGE LENGTH OF STAY AS PRIMARY DX	TOTAL DX AS SECOND	DAYS AS SECOND DX	AVERAGE LENGTH OF STAY AS SECOND DX
Age Group 0-12 months of age Choking/Suffocation	3	0	0	.00	3	1	1.00
Age Group 1-9 years of age Choking/Suffocation	3	0	0	.00	3	1	1.00
Age Group 10-19 years of age Choking/Suffocation	1	0	0	.00	1	1	1.00

Source: Guam Memorial Hospital Authority Medical Records Section

Burns:

Burns to children and adolescents frequently result from parental neglect or distraction. A high number are, therefore, preventable.

Smoke detectors have become more common in homes. They are inexpensive, reliable devices, which has led them to become, perhaps, the most widely used fire prevention devices.

**Hospital Discharge Data
Burns/Scalds
1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx

Age Group 0-12 months of age Burns/Scalds	2	0	0	.00	2	1	1.00
Age Group 1-9 years of age Burns/Scalds	10	0	0	.00	10	2	1.5
Age Group 10-19 years of age Burns/Scalds	12	0	0	.00	12	4	1.00

Source: Guam Memorial Hospital Authority Medical Records Section

Adolescents:

Adolescence is a unique developmental stage distinct from both childhood and adulthood. The second decade of life has special vulnerabilities, health concerns, and barriers to accessing health care.

However, an increasing amount of adolescents are exposed to harmful environmental conditions and risky behaviors – including early sexual activity, substance abuse, violence and other behaviors which can result in life long consequences

Adolescent Sexuality:

Adolescents continue their psychosocial development and begin to be much more aware of sexual differences. Music, media, peers, and family have great influence. Who they are and who they should be are explored and demonstrated through clothing, behaviors, and attitudes. Many youth believe that “sex is a big part of our culture” and that “everyone is doing it”.

Sexual experience, and particularly age at first intercourse, represents a critical indicator of the risk of pregnancy and sexually transmitted diseases. Although all forms of intercourse (vaginal, oral and anal) involve risks of disease transmission, youth who begin having sex at younger ages are exposed to these risks over longer periods of time.

Percentage of students in high school who reported engaging in sexual behaviors Guam

	Ever had sexual intercourse			First sexual intercourse before age 13			Had two or more partners during lifetime		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
High School 1995	48.2	44.6	46.3	5.9	11.4	8.7	8.9	14.8	11.9
High School 1997	44.7	54.7	49.4	8.4	13.2	10.6	10.1	15.8	12.8
High School 1999	44.8	47.2	46.0	13.8	16.1	14.9	27.5	27.4	27.6

Source: Youth Risk Behavior Surveillance 1995, 1997 and “1999 Safe and Drug Free School and Communities Study of Youth Behaviors”, University of Guam

Adolescent Birth:

Bearing a child during adolescence is associated with long-term difficulties for mother, child, and society. These consequences are often attributable to poverty and other adverse socioeconomic circumstances that frequently accompany early childbearing.

**Teen Pregnancy by Age of Mother
1994-1998**

	1994	1995	1996	1997	1998
Below the age of 15	15	6	4	8	7
15-19	609	596	526	481	511
Total Teen Births	624	602	530	489	518
Total Live Births	4,427	4,190	4,265	4,318	4,322

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

**Teen Pregnancy by Education of Mother
1994-1998**

Completed Education	1994		1995		1996		1997		1998	
	<15	15-19	<15	15-19	<15	15-19	<15	15-19	<15	15-19
Elementary	0	2	0	0	0	0	0	2	0	1
Middle	14	72	4	57	4	85	8	60	5	24
Some High School	1	303	0	288	0	282	0	273	1	332
High School Diploma	0	207	0	137	0	138	0	136	0	140
Some College	0	24	0	14	0	14	0	8	0	11
Not Reported	0	1	0	1	0	7	0	2	1	3
Total	15	609	4	497	4	526	8	481	7	511

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

School Dropouts:

Remaining in school is the single most important action adolescents can take to improve their future economic prospects. Teens who drop out of high school face enormous barriers in becoming financially successful in life. The likelihood of slipping into poverty is about three times higher for dropouts than those who have finished high school.

	1995-96		1996-97		1997-98		1998-99	
	Number of drop-outs	Percent	Number of drop-outs	Percent	Number of drop-outs	Percent	Number of drop-outs	Percent
Oceanview High School	98	7.6%	103	10.9%				
	Enrollment 1,290		Enrollment 945					
Inarajan High School	141	14.0%	166	15.1%				
	Enrollment 1,007		Enrollment 1,099					
George Washington High School	180	5.4%	236	8.3%	283	8.4%	347	11.0%
	Enrollment 3,333		Enrollment 2,843		Enrollment 3,369		Enrollment 3,154	
John F. Kennedy High School	215	7.4%	234	8.5%	325	9.4%	280	10.7%
	Enrollment 2,905		Enrollment 2,753		Enrollment 3,457		Enrollment 2,617	
Simon Sanchez High School	216	9.6%	247	10.6%	195	9.4%	187	7.7%
	Enrollment 2,250		Enrollment 2,330		Enrollment 2,075		Enrollment 2,429	
Southern High School					244	13.5%	258	10.1%
					Enrollment 1,807		Enrollment 2,535	
High School Enrollment	Between 10,759 and 10,785		Between 9,980 and 9,970		Between 10,684 and 10,708		Between 10,735 and 10,700	
Total	850	7.9%	988	9.88%	1,047	9.80%	1,070	10.0%

Source: Department of Education, Research, Planning and Evaluation

Family Planning:

Pregnancy rates among adolescents have been a source of concern. Many of the pregnancies are a result of inadequate contraceptive practices.

There is increasing recognition of the value of male involvement in pregnancy prevention and family planning. Males represent a small share of clients who receive family planning services.

Family Planning Users 1996 – 1999

	1996		1997		1998		1999	
	Male	Female	Male	Female	Male	Female	Male	Female
Under age 15	0	11	1	26	40	67	2	25
15 – 17	1	209	3	263	165	405	17	243
18- 19	1	297	6	393	36	315	16	357

Total	2	517	10	682	241	787	35	625
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Source: Guam Family Planning Project

Sexually Transmitted Diseases:

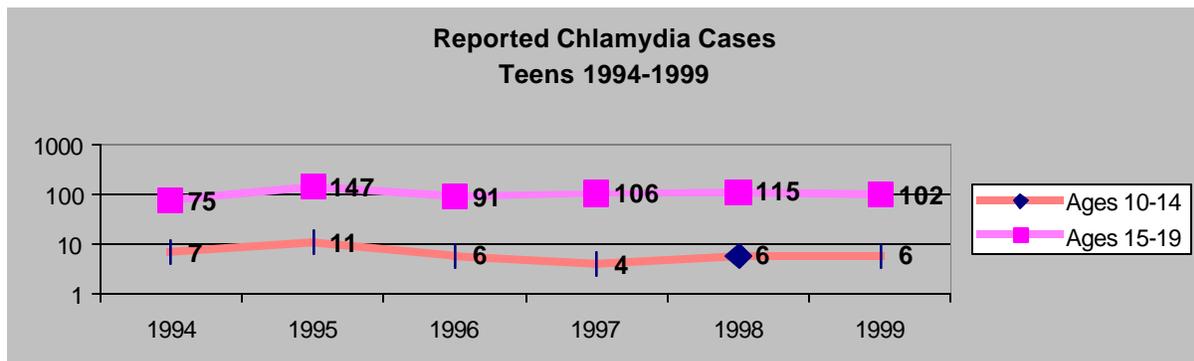
Sexually active teens are at high risk for sexually transmitted diseases (STDs). The highest rates for STDs are found in sexually active 15 to 19 years old.

Three major factors affect the spread of STDs in teens: the early age of initiation of sexual intercourse, unprotected sexual activity and intercourse with multiple partners.

There are several diseases that can be transmitted sexually. Many teens that have one may not have any symptoms and, even if they do have symptoms, they will not often seek help.

Chlamydia:

Chlamydia is the most common STD among teenagers. Chlamydia can also cause various other diseases. For males, Chlamydia can often cause urethritis. In females, it can lead to pelvic inflammatory disease (PID) and increase risk of infertility.

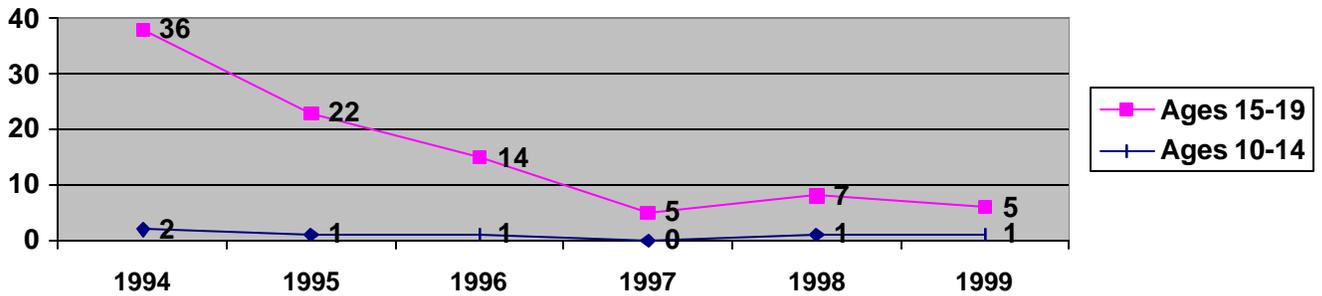


Source: Department of Public Health & Social Services, Office of Epidemiology and Research

Gonorrhea:

Gonorrhea is the second most common STD, particularly among adolescents. Gonorrhea infects the urinary tract and reproductive system of males and may lead to PID, infertility, and ectopic pregnancy.

Reported Gonorrhea Cases Teens 1994-1999



Source: Department of Public Health & Social Services, Office of Epidemiology and Research

HIV/AIDS:

The current HIV/AIDS situation implies the epidemic has not significantly impacted Micronesia. However, current Guam data reflects the increased rate of HIV infection since reporting HIV/AIDS began in 1985. Guam's cultural diversity of the six U.S. Affiliated Pacific Islands must address the current situations as a region since significant travel and contact within Micronesian jurisdictions, the United States mainland and Asia exist on Guam.

Department of Public Health and Social Service data reflects that Men Sex Men (MSM) accounts for the highest number of reported HIV/AIDS cases. Furthermore, the current "ice" (crystal Methamphetamine) epidemic, increased drug trafficking, a rapidly mobile and transient population, a growing underground sex industry, escalating numbers of intravenous drug users as well as Guam's connection to Asia, the U.S. mainland, Australia and other Pacific Islands territories pose great risk of the likelihood of an increased number of STDs and transmission of HIV/AIDS.

Men having sex with men (MSM) continue to be the group greatest at risk for HIV and AIDS, comprising 70% of HIV cases and 62.5% of AIDS cases in 1999. Over the fifteen-surveillance period, MSM contributed to nearly 46% of HIV and over 50% of AIDS cases. The risk factor with the second highest proportion of cases of HIV and AIDS cases since 1985 is heterosexual transmission followed by unknown/other risk factors. For 1999, both injecting drug and heterosexual transmission accounted for 10% of new cases of HIV.

**Risk Factors as a Percent of All HIV and AIDS Cases
1985 - 1999**

Risk factor	1985-1999		1996		1997		1998		1999	
	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS
Men who have sex with men	45.80	54.24	50.00	50.00	30.00	40.00	50.00	50.00	70.00	62.50
Bisexual	6.87	11.86	0.00	0.00	20.00	20.00	7.14	16.67	0.00	25.00
Injecting Drug Use	6.87	8.47	14.29	10.00	0.00	0.00	0.00	0.00	10.00	0.00
Heterosexual	19.85	10.17	21.43	20.00	30.00	20.00	7.14	16.67	10.00	12.50
Blood/Blood Product	5.34	8.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mother to Infant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other/Unknown	15.27	6.78	14.29	20.00	20.00	20.00	35.71	16.67	10.00	0.00

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

While the rates for other sexually transmitted disease are usually high in the age group of 20 to 29, HIV and AIDS incidence is highest for those 30 to 39 of age. Over the fifteen-year period, HIV incidence for those 30 to 39 years of age was nearly double that of those 20 to 29 years of age, while AIDS incidence for the 30 to 39 year group was five times higher than the incidence rate for the 20 to 29 year old group. Annual incidence for both HIV and AIDS was unchanged between 1998 and 1999 for those 30 to 39 years old. HIV incidence for those 40 to 49 decreased slightly between 1998 and 1999, but AIDS incidence nearly quadrupled.

**HIV and AIDS Incidence Rates by Age
1985 – 1999 (rates per 10,000 population)**

Age Group	1985-1999		1996		1997		1998		1999	
	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS	HIV	AIDS
< 13	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
13-19	1.82	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00
20-29	13.08	2.83	1.38	0.00	0.49	0.00	1.52	1.02	0.00	0.00
30-39	25.68	14.55	4.65	3.38	2.12	1.70	2.54	1.27	2.54	1.27
40-49	12.64	6.65	0.54	0.54	1.06	0.00	1.55	0.52	1.51	2.02
50+	2.69	4.30	0.00	0.46	0.44	0.44	1.26	0.84	0.00	0.40

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Sexual education courses are teens' number one source of information regarding HIV and AIDS. Parents are a distant second.

Percentage of students in high school who reported being taught about HIV/AIDS in school and percentage who reported talking about HIV/AIDS with parents or other adult family members, by sex

Guam

	Taught about HIV/AIDS infection in school			Talked about HIV/AIDS infection with parents or other adult family members		
	Female	Male	Total	Female	Male	Total
High School 1995	90.2	89.2	89.7	62.8	57.7	60.1
High School 1997	85.6	80.7	83.3	59.1	41.6	50.8

Source: Youth Risk Behavior Survey 1995, 1997

High Risk Behavior:

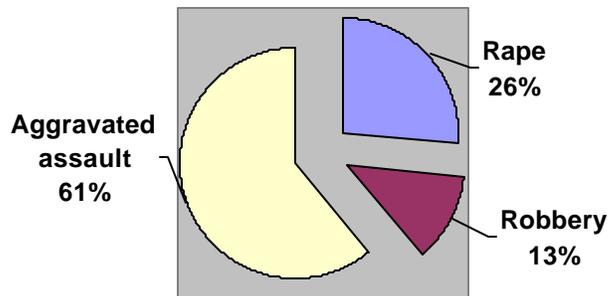
The adolescent years are often filled with anxiety, confusion, and risk-taking as young people make the complex transition from childhood to adulthood. During this period, many young people begin dangerous experimentation with drugs, alcohol, tobacco, and unprotected sexual activity and engage in other life-threatening behaviors.

Juvenile Violence:

The level of juvenile violence has remained constant in recent years, however, it is increasing and becoming more visible. The increase in juvenile violence may be due to the island’s rapid growth, diverse ethnic culture, and the constant overcrowding of schools. Today, the types of juvenile violence activities taking place are murder, non-negligent manslaughter, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson.

In calendar year 1998, 353 juveniles were arrested for crime index offenses. Of the 353 juveniles arrested, 72 (20%) were for violent crime offenses; and 281 (80%) were for property crime offenses.

Juvenile Violent Crime - 1998

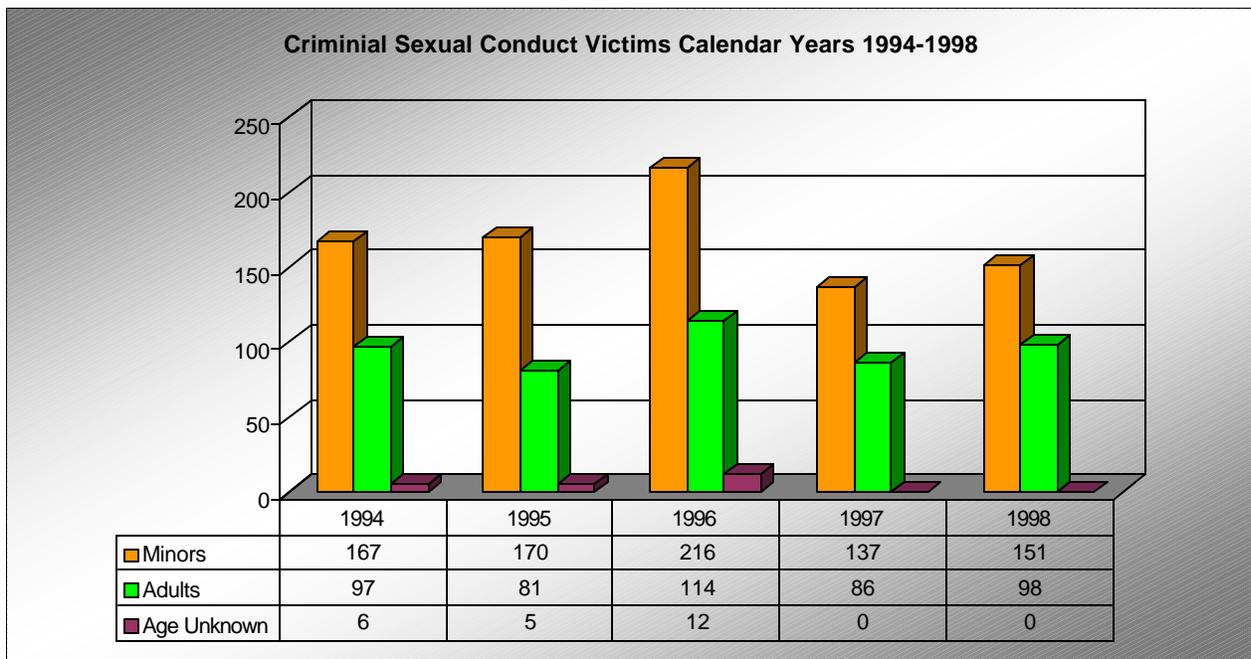


Source: Uniform Crime Report, Guam Police Department 1998

Violence among intimate partners continues to pose a major public health challenge because of its steady trend among couples and increasing attention to early onset of partner violence in the adolescent years.

The number of rapes and attempted rapes, primarily of women, on Guam, have fluctuated in the six years between 1993 and 1998, from a low of 86 reported forcible rapes in 1997 to a high of 168 reported rapes in 1996. The rate of forcible rapes and criminal sexual conduct cases has also fluctuated, from a low of 1.38 per 1,000 women in 1997, to a high of 2.36 per 1,000 women in 1996. The proportion of sex offenses against minors has shown an increase over the last five years, from 64.4% in 1993 to a high of 67.8% in 1997. The frequency of rapes and sex offenses has fluctuated since 1993, from one every 1.63 days in 1993, to a high of one every 1.07 days in 1996 to a low of one every 1.81 days in 1997.

While nearly 61% of victims of sex offenses were minor in 1998, nearly 79% of arrested offenders were also minors. This proportion has fluctuated since 1993, when it reached 1.3% of offenders, to 8.9% in 1996 and 1997. The average proportion of offenders who were minors over the last six years has been 11.7%.



Source: Uniform Crime Report, Guam Police Department 1998

Schools should be safe and secure places for all students, teachers and staff members. Without a safe learning environment, teachers cannot teach and students cannot learn. It is the hope that all children will be able to go to and from school without fear for their safety or the safety of their friends and teachers.

The presence of deadly weapons at school can create an intimidating and threatening atmosphere, making teaching and learning difficult. The percentages of students who report carrying a weapon or a gun to school is an indicator of how widespread the problem of weapons at school is.

Percentage of students in high school who reported engaging in violence related behaviors at school by sex

	Carried a weapon *on school property		
	Female	Male	Total
High School 1995	2.1	12.2	7.4
High School 1997	1.1	11.5	6.0
High School 1999	3.2	15.0	8.7

* such as a gun, knife, club

Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

One consequence of school violence is the fear that it can instill in students. Students who fear for their own safety may not be able or ready to learn. Concerns about vulnerability to attacks by others at school and on the way to and from school may also have a detrimental effect on the school environment and learning.

Percentage of students in high school who reported engaging in violence related behaviors at school by sex

	Felt too unsafe to go to school		
	Female	Male	Total
High School 1995	13.2	8.6	10.8
High School 1997	10.7	15.8	13.1
High School 1999	9.3	8.8	9.0

Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Every year, some students are injured or threatened with injury while they are at school. The percentages of students victimized in this way can provide an important measure of how safe our schools are and how this is changing over time.

Percentage of students in high school who reported engaging in violence related behaviors or being affected by violence on school property, by sex
Guam

	Threatened or injured with a weapon on school property			In a physical fight on school property			Injured in a physical fight on school property		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
High School 1995	7.9	11.0	9.3	10.6	28.2	18.9	3.8	6.2	4.9
High School 1997	7.5	9.9	8.8	10.0	21.8	16.0	1.4	6.3	4.0
High School 1999	3.5	11.7	7.3	8.9	17.5	12.9	3.5	6.2	4.8

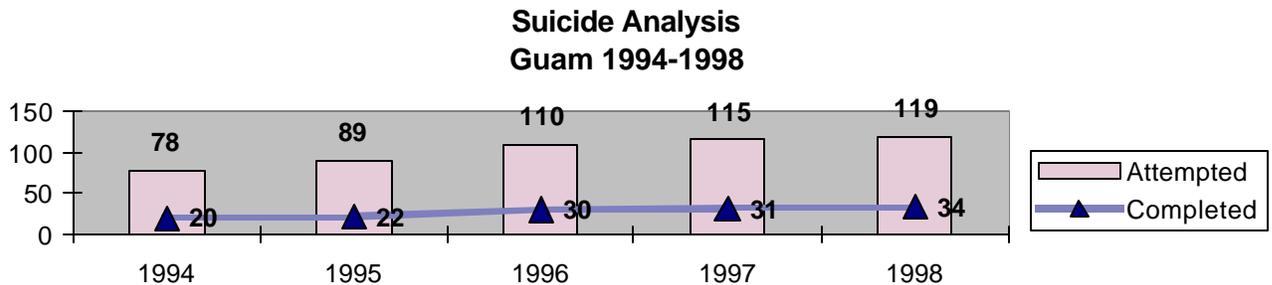
Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Suicide:

Suicide is the extreme and tragic outcome of a complex interplay of high risk behaviors, unfortunate life events and societal pressures that together may result in a young person taking his or her own life.

Suicide is the second leading cause of death to youth 15-19 on Guam and a serious potential outcome of mental illness and mental disorder. Mental disorder such as various forms of depression, schizophrenia, panic disorders and adjustment and stress reactions as well as alcohol and other drug abuse have been implicated in both attempted and completed suicide.

On Guam, most suicide attempters are female (78%). The trend shows that attempts are increasing in the age group of 14-18 years old. The prevailing pattern is 2 to 3 attempts then either the attempt is completed or the individual receives intervention. Most completed suicides are by males. The pattern is completion with the first attempt. Methodology is hanging (65%) and then firearms (25%).



Source: Uniform Crime Report 1998, Guam Police Department

Adolescent Suicide by Sex and Method: Guam 1994-1998

	1994	1995	1996	1997	1998
Ages 10-14					
Males					
Hanging	1	1	0	0	0
Ages 15-19					
Males					
Hanging	2	2	2	2	2
Firearms	0	0	2	0	0
Ages 10-14					
Females					
Hanging	1	0	0	0	1
Firearms	0	0	0	0	1
Ages 15-19					
Females					
Hanging	0	0	0	2	0
Jumping	0	0	0	0	1
Total	4	3	4	4	5

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Unfortunately, it is difficult to identify particular individuals at greatest risk for suicidal behaviors or completed suicide. Prevention of suicide must rest on a thorough knowledge of risk factors. Understanding risk factors can help dispel the myths that suicide is a random act or results from stress alone. Suicide prevention demands approaches that reduce the likelihood of suicide before vulnerable individuals reach the point of danger.

Percentage of students in high school who reported having seriously considered attempting suicide and who reported suicidal behavior, by gender and grade level

	Seriously considered attempting suicide			Made a suicide plan			Attempted suicide		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
High School 1995	37.1	26.4	31.5	31.4	21.8	26.4	26.6	14.7	20.5
High School 1997	35.7	23.1	29.7	29.6	20.2	25.2	20.9	17.9	19.5
High School 1999	34.6	20.9	28.2	33.8	22.5	28.5	24.9	12.4	19.0

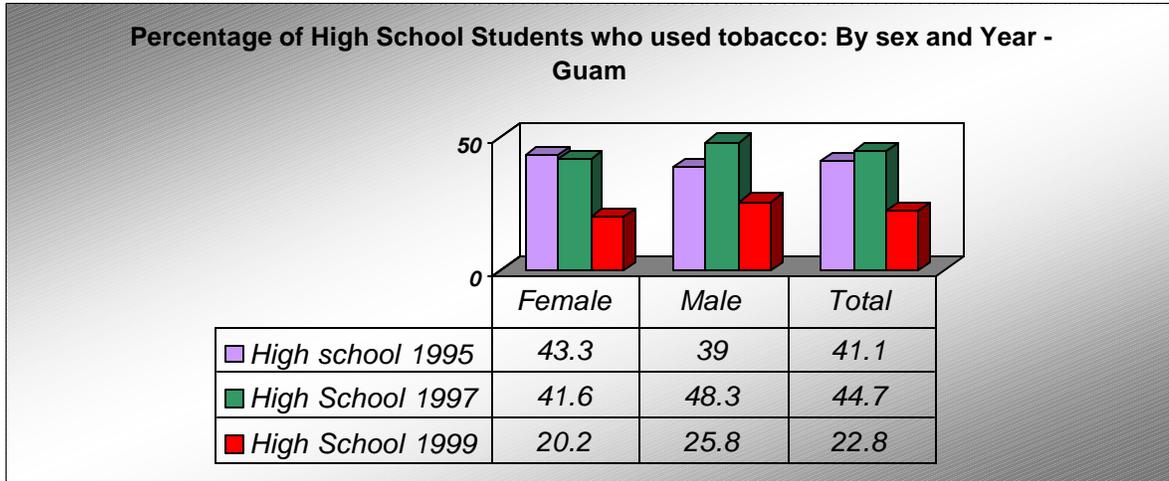
Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Substance Abuse:

There are various theories about how young people are introduced to and become involved with alcohol and other drugs. Many adolescents never choose to try alcohol and other drugs and many experiment and never use again. Some, however, appear to follow a progression from nonuser, to experimenter, to social or occasional user, to regular user, and finally to constant (ab) user.

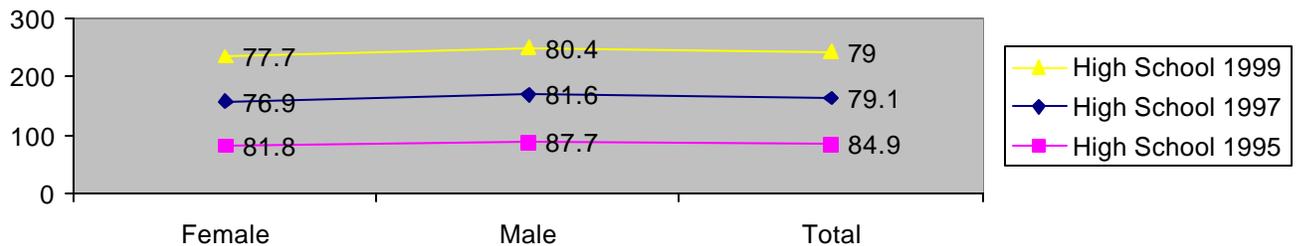
Tobacco:

Tobacco use is the most preventable cause of death in the United States. Substance abuse, including tobacco use and nicotine dependence, is associated with a variety of other serious health and social problems.



Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Percentage of High School Youth who are lifetime Cigarette Smokers by Year and Sex - Guam



Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Alcohol:

Alcohol is the most frequently used drug in the United States. While its sale to minors is illegal, it is estimated that millions of teen who drink alcohol buy their own beverage using fake identification.

Percentage of students in high school who reported engaging in drug-related behaviors by sex, by year

	Current alcohol use			Lifetime alcohol use			Episodic heavy drinking		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
High School 1995	30.5	37.6	34.1	68.1	65.0	66.5	12.7	16.6	14.7
High School 1997	37.9	46.9	42.0	72.3	76.3	74.1	17.7	29.2	22.9
High School 1999	40.3	48.5	44.0	75.7	78.5	76.9	18.5	27.7	22.8

Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Marijuana Use:

Marijuana is the most commonly used illicit drug. Adolescents aged 12 to 17 years who smoke marijuana are more likely to cut class, steal, attack persons, and destroy property than those who did not smoke marijuana.

Percentage of students in high school who reported engaging in drug-related behaviors by sex, by year

	Current Marijuana use			Lifetime Marijuana use			Marijuana Use on School Property		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
High School 1995	18.6	19.9	19.3	37.0	42.3	39.8	3.5	9.6	6.7
High School 1997	18.0	38.6	27.8	43.0	54.3	48.3	8.2	15.8	11.8
High School 1999	20.4	36.5	27.9	45.0	58.8	51.4	8.0	13.1	10.4

Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

Other Drug Usage:

Anabolic Steroids are used by some athletes to increase muscle size and strength to improve performance. Anabolic steroids are synthetic derivatives of testosterone and are taken orally or by injection. According to Dr. John Tsuang, a person using anabolic steroids may initially report an enhanced sense of well-being. Long term use may induce such manifestation as dysphoria, irritability, and lack of energy among other psychiatric symptoms.

Inhalants include easily obtained household items such as glue, paint solvents, nail polish remover, and pressurized butane gas refill bottles. Being inexpensive, legal, and easily obtainable, it is not hard to understand why this form of getting a "happy high" is more prevalent than costly and legally controlled drugs such as sedatives, stimulants, hallucinogens, and forms of cocaine and heroine.

Percentage of students in high school who reported engaging in substance use/abuse, by sex, by year

	Lifetime Illegal Steroid use			Ever sniffed or inhaled intoxicating substances		
	Female	Male	Total	Female	Male	Total
High School 1995	2.7	1.9	2.3	13.1	16.9	15.1
High School 1997	3.6	4.3	3.9	17.8	18.5	18.2
High School 1999	1.6	4.7	3.1	14.7	15.3	15.0

Source: Youth Risk Behavior Survey 1995, 1997 and "1999 Safe and Drug Free School and Communities Study of Youth Behaviors", University of Guam

CHILDREN WITH SPECIAL HEALTH CARE NEEDS:

Services for Children with Special Health Care Needs (CSHCN):

Children and adolescents with Special Health Care Needs are defined as “those who have or are at increased risk for chronic, physical, developmental, behavioral or emotional conditions and who require health and related services of a type or amount beyond that required by children generally.” (McPherson, Arango, Fox, Lauver, McManus, Newacheck, Perrin, Shonkoff and Strickland, 1998).

Health care for the island’s CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), and the Medicaid Program (MAP) and through local health maintenance organizations (HMO’s) and private clinics under self-pay. Public health nursing personnel conduct case findings and make referrals to the MIP and MAP and follow up to ensure that these clients are visited. The MIP and MAP are responsible for reimbursement to the providers for the services rendered.

The care provided to CSHCN include diagnostic evaluations and appropriate care to children with or at-risk for chronic and/or disabling conditions; case management; referrals to appropriate agencies for needed services and Community Health Nurse home visit services; immunizations; screening referral for developmental, audiological and/or speech evaluations; referral to the Special Supplemental Nutrition Program for Women, Infants and Children (WIC); referral for nutrition counseling; health education classes on Abstinence and Family Planning for adolescents and referral to Dental Health Services.

The goal of the CSHCN component of the MCH Program is that all infants, children, and youth will live in a safe, nurturing environment and will have resources available to assist them in achieving and/or maintaining optimum health and development. The CSHCN component is designed to assure that community members are active participants in the planning and provision of community-based services for children with special needs and their families.

The island does not have a Supplemental Security Income (SSI) Program to provide rehabilitation services to individuals under the age of sixteen with disabilities. Moreover, the Medicaid (MAP) or local Medically Indigent Program (MIP) does not have any provisions for these services. However, if such services are needed, individuals and families may seek assistance through non-profit organizations and the Department of Integrated Services for Individuals with Disabilities (DISID).

Although baseline data on specific health and developmentally disabling conditions of the population on Guam is fragmented, allowing only a rough indicator of the number of infants and children with Special Health Care Needs, it can be estimated that approximately ten percent of the live births on the island have required neonatal intensive care, of which 30% will develop special health needs. On Guam, approximately 100 infants per year may require care for special health needs. This however does not reflect the actual number of Children with Special Health Care Needs when moving beyond traditional categories of biological criteria to include environmental criteria such as poverty, single parenthood, and other parental factors.

Leading Causes of Death

Less than One Year Old

Cause	1994	1995	1996	1997	1998	5-yr total
Perinatal Conditions	16	16	21	13	10	76
Congenital Anomalies	11	5	3	8	5	32
Pneumonia	3	1	1	1	2	8
All Other Accidents	1	1	1	0	0	3
All Other Causes	11	15	12	16	17	71
Total	42	38	38	38	34	190

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Low Birth Weight and Very Low Birth Weight:

Low birth weight is the factor most closely associated with neonatal mortality. Low birth weight infants are more likely to experience long-term disabilities or to die during the first year of life than are infants of normal weight.

Very low birth weight infants who survive are at significantly increased risk of severe problems, including physical and visual difficulties, developmental delays and cognitive impairment requiring increased levels of medical, educational, and parental care.

**Live Births by Weight
Guam**

	1994	1995	1996	1997	1998	1999
1lb 1oz- under	1	5	2	0	2	2
1lb 2oz – 2lb 3oz	11	14	12	9	10	11
2lb 4oz- 3 lb 4oz	18	22	20	25	19	15
3lb 5 oz – 4 lb 6 oz	43	53	57	55	69	64
4lb 7oz – 5 lb 8 oz	211	231	216	219	228	227
Total Low birth weight	284	325	307	308	328	319
Total Very low birth weight	30	41	34	34	31	28
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,039

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Insurance Status:

The Maternal and Child Health Bureau uses the definition of a “medical/health home” as: “medical care of infants, children and adolescents that is accessible, continuous, comprehensive, family-centered, coordinated and compassionate. It should be delivered or directed by well-trained physicians who are able to manage or facilitate essentially all aspects of care.”

Health care for the island’s CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), the Medicaid Program (MAP) and through local health maintenance organizations (HMO’s) and private clinics under self-pay. Public health nursing personnel conduct case findings and make appropriate referrals to the MIP and MAP.

The goal of the CSHCN component is to ensure access to quality comprehensive, community-based health care systems for all infants, children, and adolescents with special health care needs.

Congenital Anomalies:

Congenital anomalies encompass any structural, functional or biochemical abnormality determined genetically or induced during gestation and not due to birthing events. Some

malformations require extensive medical or surgical interventions; some present lifelong disabling conditions requiring rehabilitative or custodial care, while the effect of others is relatively minor.

**Live Births With Congenital Anomalies
1994-1999**

	1994	1995	1996	1997	1998	1999
Fetal Alcohol Syndrome	0	0	0	3	1	0
Anencephalus	0	0	0	0	0	0
Spina Bifida/Meningocele	0	0	0	0	1	1
Hydrocephalus	0	0	0	1	1	0
Other Central Nervous System	0	0	0	1	0	0
Heart Malformation	0	1	1	4	3	0
Circulatory/Respiratory	0	1	1	4	3	1
Rectal Atresia	0	0	0	0	1	0
Tracheo/Esophageal	0	0	0	0	0	0
Omphalocele/Gastrointestinal	0	0	0	7	0	0
Gastrointestinal	0	0	0	7	2	0
Malformed Genitals	0	0	0	0	1	1
Renal Agenesis	0	0	0	0	1	0
Urogenital	0	0	0	0	0	1
Cleft Palate	1	2	4	0	7	1
Polydactyly	0	0	3	0	0	0
Club Foot	1	0	0	2	5	1
Diaphragmatic	0	0	0	0	0	0
Musculoskeletal	1	0	3	1	0	0
Down Syndrome	1	0	0	0	1	0
Chromosomal	0	1	1	1	2	0
Other	5	1	0	0	12	2
Total	9	6	13	31	41	8
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,037

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Newborn Metabolic Screening:

The MCH Program has taken the lead to implement a tracking system for the Newborn Metabolic Screening Program. Guam Memorial Hospital Authority (GMHA) routinely conducts newborn metabolic screens for all neonates born at the GMHA. However, there was no mechanism in place for tracking babies with abnormal metabolic screens or any indication whether a repeat test or early intervention was done to the client. In 1998, MCH developed a disposition form for tracking abnormal screens done at GMHA and to ensure that the physicians (private and public) do a repeat test as scheduled, confirm a diagnosis, and provide early intervention and treatment, as necessary. As of October 1999, there were 186 disposition forms received by the MCH Program. Initially, the submission of the disposition forms was slow, but the submission of the form has tremendously improved within the past months as a result of continual awareness education given to the physicians during the monthly Pediatrician Committee and Family Practice Committee Meetings held at GMHA.

Newborn Metabolic Screening

	1994		1995		1996		1997		1998		1999	
	Scr	Pre +	Scr	Pre +								
Phenylketonuria	3721	4	4165	0	4194	14	3675	96	4266	96	3597	1
Congenital Hypothyroidism	3721	213	4165	0	4194	110	3675	88	4266	88	3597	125
Galactosemia	3721	20	4165	24	4194	45	3675	5	4266	5	3597	0
Hemoglobinopathies	3721	98	4165	98	4194	85	3675	93	4266	93	3597	142
Percent of Live Births Screened	84.05		99.42		98.33		85.10		85.10		98.1	
Total Live Births	4427		4189		4265		4318		4318		4037	

Source: Medical Records, Guam Memorial Hospital Authority,

Care Coordination Early Intervention:

The Department of Education, the lead agency for the Guam Early Intervention System (GEIS), supports the full inclusion of infants and toddlers with or “at risk” for developmental delays and their families. The Guam Early Intervention System is comprised of two units, both located at the University of Guam, which provide services and support for infants and toddlers and their families eligible for early intervention services under Part C of the Individuals with Disabilities Education Act (IDEA). These are the Diagnostic Unit and the Intervention Unit.

Diagnostic Unit:

Pediatric Evaluation and Developmental Services (PEDS) provides identification, referral, screening, evaluation, assessment and intervention services for children from

birth to age three. Developmental areas evaluated and assessed by PEDS staff include hearing, gross and fine motor, speech and language and cognitive abilities.

The Infant Diagnostic Team (IDT) provides immediate intervention services to newborns at the Guam Memorial Hospital's Neonatal Intensive Care Unit (NICU) or the intermediate care nursery. The IDT includes a registered nurse, as well as a developmental specialist to ensure that newborns receive services as soon as possible.

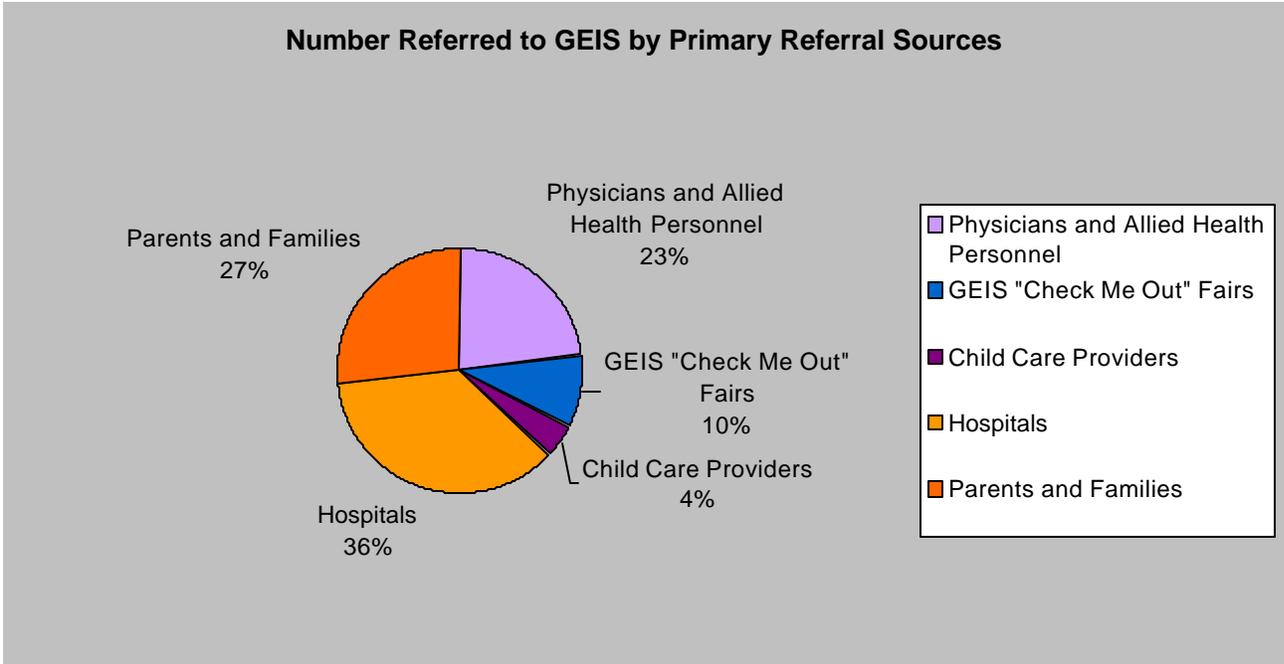
The Rapid Response Team (RRT), in addition to the regular PEDS Team, is a diagnostic team that has been working to provide evaluation and assessment services outside the regular normal workweek. The team is comprised of a social worker, speech pathologist, occupational therapist, physical therapist and developmental specialist who are available as needed to accommodate families after hours and on weekends.

Intervention Unit:

The Infant/Toddler Program is comprised of nurses, social workers, teachers, paraprofessional and child development specialists, that provide family support and intervention services for children who are eligible for GEIS services.

The Community Integrated Play Groups are located in the community centers and are facilitated by GEIS Play group teachers and paraprofessionals. Play group families' meet four times a week and include not only families of children with developmental delays and their siblings, but also families of "typical" children from within the community.

Child Find is an aggressive community outreach to screen newborns through five year old in the areas of health, hearing, vision, speech and language, cognitive and social development.



Source: Department of Education, Division of Special Education

Newborn Hearing Screening:

The Guam Memorial Hospital Authority (GMHA) acquired the Distortion Product Otacoustic Emission Equipment (DPOAE). The newly acquired instrument was to be used by the GMHA Nursery nurses on newborns prior to discharge. Those failing or who were recommended for further evaluation, or those not seen for DPOES prior to discharge, are seen at the Pediatric Evaluation and Development Services (PEDS). Unfortunately, the testing tool at GMHA has malfunctioned and it is not known if replacement parts are available.

The Pediatric Evaluation and Development Services (PEDS) conducted the following evaluation in 1999:

Audiologist/Audiometrist (DPOAE)	425 clients
Audiologist (Auditory Brainstem Response)	7 clients
Speech/Language Pathologist	218 clients

HEALTH CARE DELIVERY SYSTEM:

The turn of the century offers an opportune time to take stock of the current state of health care on Guam. Guam's health care delivery system is pluralistic, distinguished by a public and private sector for the local civilian population, and a military system for the delivery of medical services to the active military members and their dependents, as well as the military retirees and veterans on Guam.

All the health services customarily found in a community of similar size in the U.S. mainland are available to the island population. One unique problem setting Guam apart from the mainland communities is that specialized and tertiary medical services are thousand of miles away, necessitating medical referrals to Japan, the Philippines, Hawaii, or the United States mainland. Guam is situated in the Western Pacific. The United States' western-most territory lies about 5,800 (12 hours flight time) from the U.S. mainland, and 3,800 miles (7 hours flight time) southwest of its closest U.S. neighbor, Hawaii. Guam, while being remote from the United States, is closer to the Asian rim. Tokyo, Taipei, Manila, and Hong Kong are all within three hours flight time. Such referrals are cumbersome, time-consuming and usually impact considerably on individual and government financial resources.

The patients fly out on commercial airlines, which cause multiple difficulties. The plane itself is not equipped for medical transports, sufficient number of available seats cannot be guaranteed, transport times are long and the plane passes no place during flights where an emergency landing could be made if a patient's condition deteriorates. In addition, language barriers complicate some medical transfers to other countries.

Furthermore, there are multiple reimbursement issues and patient loading and unloading onto a commercial airline is physically difficult and logistically a nightmare.

Availability of Care:

In 1997, there were 44.0 Full Time Equivalent (FTE) civilian Primary Care physicians, and at least five (5) foreign medical graduates who are counted as a half FTE at most, practicing on Guam. This includes three (3) OB/GYN who did no deliveries; two (2) Pediatricians and two (2) Internists who closed their practices to new enrollment and five (5) physicians who were semi-retired. In the last two years, at least one civilian medical clinic has declared bankruptcy and reduced its operations; an HMO closed one of its operating sites; several physicians have moved to administration rather than medical practice, and others simply have not been in practice; and more specialty clinics have opened. This has reduced the overall number of primary care physicians on-island. Some physicians, due to age, have reduced the number of hours they see patients, both in clinic and in hospital. As the only civilian hospital is still unaccredited, many physicians send their patients off-island for both diagnostic and treatment procedures, reducing the number of hours they spend seeing patients in-hospital.

Private Sector:

The private sector caters more to the individual needs in the community, providing, on a one-to-one basis, outpatient medical and dental care, laboratory, radiological and optometrical services, as well as pharmaceuticals. There are several multi-specialty medical/dental groups. In addition, there are specialty medical group practices and individual physicians and dentists. Auxiliary services are provided by independent laboratories, pharmacies, and optical retailers within the community.

Military Sector:

The military system consists of the U.S. Naval Hospital and smaller outpatient dispensaries at various military locations throughout the island. The U. S. Naval Hospital is the military's central facility for general acute care. The hospital also provides outpatient services in the various medical disciplines and maintains a dental clinic. The medical center is self-contained and provides auxiliary services needed in conjunction with the provision of medical care. It is staffed and equipped to deal primarily with the medical needs of active military personnel on Guam and their dependents; however, health care needs of military retirees, veterans and their eligible dependents are addressed as well.

The U.S. Naval Hospital is not considered a functional component of Guam's health care delivery system. However, there is some interaction between the public and military systems. Specialized medical officers provide a limited amount of consultation, diagnosis, and treatment services. During supply and pharmaceutical shortage at the Guam Memorial Hospital Authority or the Department of Public Health and Social Services, the U.S. Naval Hospital can be depended on for furnishing the needed items. Naval and Air/Sea Rescue Units on Guam serve the community as well as the neighboring islands. Furthermore, the military serves as a back up which could be immediately mobilized during man-made or natural disasters.

In addition, Guam's military personnel use the private medial service providers whenever a medical specialty is not provided through the military system through the CHAMPUS (Civilian Health and Medical Program of Uniformed Services) program.

Public Sector:

The Department of Mental Health and Substance is the sole public agency available and authorized to provide in and out patient mental health services. The central mission of the department is to provide comprehensive inpatients and community based outpatient mental health care, as well as drug and alcohol programs and services for the people of Guam. In addition, the department is mandated to strive towards the improvement, enhancement and the promotion of the physical and mental well-being of the residents of Guam who experience the life disturbing effects of mental illness, alcoholism and drug abuse as well as to those who are at risk of suffering those effects and who need such assistance.

Guam Memorial Hospital Authority (GMHA) serves as the sole civilian hospital. The hospital is a non-accredited Level II Trauma Center. The hospital is a 221-bed facility, which provides acute and long-term care, including skilled and intermediate nursing care. The hospital offers all customary care and certain specialty services. The hospital maintains approximately 77-80 beds in its medical, surgical and special care units which comprise a little over half of the total acute care beds. In addition to the procedures that require inpatient stays, there have been a growing proportion of procedures performed on an outpatient basis. These procedures are performed either in the hospital or in one

of the surgi-centers. Approximately 30% of the surgeries done at GMHA are “come-and-go-surgery”. Two ambulatory surgical centers provide services as well.

The Department of Public Health and Social Services mission is to achieve and maintain the highest levels of independence and self-sufficiency in the health and social welfare of the island of Guam residents. The functions, responsibilities, and authority of the department are defined by local and federal laws and regulations. Both local and federal monies fund the various programs and services. Except for categorical programs governed by specific eligibility regulations, social and health care services are generally provided to low-income families and individuals free of charge.

Through the department services that are provided include preventive medical and dental services, health education, and diagnosis and treatment for communicable diseases, maternal and child health, family planning, services for children with special health care needs, immunizations, special supplemental foods and food stamps, welfare services, child and adult protective services, chronic disease and dental services for children.

Southern and Northern Region Community Health Centers (SRCHC) (NRCHC) are fixed facilities that provide comprehensive, culturally sensitive, coordinated and continuous care to improve the health status of the medically uninsured and underinsured population. Both SRCHC and NRCHC are under the Bureau of Primary Care Services (BPCS). These Centers operate on a sliding scale fee for service plan. Guam is unique compared to other States in that the indemnity insurance companies contract the same pool of physicians. Therefore, it is difficult for Guam to adopt managed care due to the limited number of physicians. Public and private organizations, health agencies, and community-based organizations refer patients to SRCHC and NRCHC. Physicians assigned into these centers have expertise in family practice, internal medicine, and pediatrics. Nurse Practitioners provide Women’s Services.

Emergency Medical Services System:

In 1977, Guam passed legislation establishing the Emergency Medical Services System for the island. The law designated the Department of Public Health and Social Services as the lead agency and established the Emergency Medical Service (EMS) Administration Office within the department. The EMS Medical Director is a part-time, contractually paid Emergency Medicine Physician. This physician also serves as acting Medical Director to the Guam Fire Department and oversees the Base Station operations of the only civil Emergency Department of the island.

Guam has one civilian ambulance service provider, the Guam Fire Department (GFD). The military (Air Force and Navy) each have ambulance units, which serve their jurisdictions, and there is a Mutual Aid Agreement in place with each military unit for mutual aid assistance to the local ambulance service. The Guam Fire Department operates ten (10) ambulances throughout the island; the Navy and Air Force have

seven (7) to cover their jurisdictions. GFD operates their ambulances at the BLS Level with two (2) of the units providing ALS Services (EMT-Intermediate with I.V., intubations, and EKG and medication skills) plus one ALS Intercept (non-transport) unit. The military have BLS ambulance only.

Guam has approximately 196 certified Emergency Medical Technicians-Basic at this time. The number reflects those EMTs certified under the local EMS Office. This does not include the military EMTs who perform under the military jurisdiction and are certified through National Registry. Within the local system, there are 31 certified EMT-Intermediates. The EMS Office does not certify First Responders.

The Emergency Departments of both hospitals are capable of addressing pediatric emergencies. Neither hospital is formally or informally identified as more capable in providing emergency care for ill or injured children. In-hospital care for ill or injured children is the same at these two facilities. Both hospitals have a Pediatric and Neonatal Intensive Care Unit. Furthermore, both have pediatric inpatient units. All of the outpatient clinics see pediatric patients. Some pediatricians have private clinics specializing in seeing pediatric patients only. Overall, there are seventeen (17) civilian pediatricians (fourteen of whom are board certified) on Guam of whom two (2) subspecializes in pediatric critical care. There is no pediatric surgeon on Guam, even though one of the general surgeons has become quite skilled at pediatric surgery

“Native” or Traditional Health Care Providers:

Suruhanas or Suruhanos are native Chamorro healers who use natural herbs in combination with massage to cure a variety of complaints. The name is believed to come from the Spanish word “cirujano” for ship doctors who came to Guam with the Spanish galleons.

Suruhanas and Suruhanos are considered to be “good” people who have received their powers from God. In addition, it is believed that the powers are inherited and that they usually stay within a family. However, if there is no family member to continue with the healing, a suitable apprentice is trained. A working knowledge of curative herbs, where and when they grow, how they are transformed into medicine, as well as anatomy of the human body is taught over several years. Practicing suruhanas or suruhanos rely heavily on experience and success with a particular treatment. Some suruhanas or suruhanos specialize in particular fields such as pregnancy and childbearing while others will treat matters related to skeletal or muscular systems.

Hilots are traditional Filipino healers, who function much the same as suruhanas and suruhanos. As expected, the hilots’ services are used more frequently by those of Filipino descent than any other ethnic group.

Kakahnas are a particular group of healers that is no longer as prevalent now as it was in the years before World War II. Kakahnas healed primarily through supernatural powers and were considered by many to be sorcerers. Folklore holds that the kakahnas

could invoke the souls of the dead and could communicate with the Taotaomonas or “Old People” who are believed to be the spirits of ancient Chamorros.

Financial Access to Care:

Guam Public Law 18-31 established the Medically Indigent Program (MIP). MIP is 100% locally funded. The program provides medical assistance to low-income families who are residents of Guam. Lawmakers have been discussing making changes to the MIP. The program currently pays 100% of the costs associated with any medical treatment. However, lawmakers and public health officials are considering placing limits on the expenses paid by the MIP. In addition, officials are considering limiting the MIP to United States citizens, the same standard used by the Medicaid Program. Officials estimate that 20% of the citizens enrolled in the MIP are not U.S. citizens.

As reported in the Behavioral Risk Factor Surveillance System (BRFSS) conducted by the Department of Public Health and Social Services, Office of Planning and Evaluation, there were approximately 9,996 uninsured children on Guam. In 1999, there were approximately 64,393 children below the age of 18. Using the 9,996 figure for uninsured children on Guam, the percentage of uninsured children stood at 15.52%.

The island of Guam applied for the Children’s Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide similar benefits to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

Federal law established a minimum benefit package that must be available to all children and adolescents who are eligible for Medicaid. This federally mandated Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program includes periodic comprehensive physical and mental health assessments that must be provided in accordance with a schedule developed by states in consultation with professional child health organizations. Under Medicaid EPSDT, states are required to provide a comprehensive range of early detection and prevention services that includes health assessment, screening and support services; comprehensive acute and chronic care; medical, dental, vision, hearing and well-child check up; immunizations; lab tests and health education. EPSDT requires states to provide children and adolescents with services that are “medically necessary” in order to treat physical and/or mental conditions identified through EPDST screenings.

The island does not have a Supplemental Security Income (SSI) Program to provide rehabilitation services to individuals under the age of sixteen with disabilities. Moreover,

the Medicaid (MAP) or local Medically Indigent Program (MIP) have any provisions for these services. However, if such services are needed, individuals and families may seek assistance through non-profit organizations and the Department of Integrated Services for Individuals with Disabilities (DISID).

Annual Budget and Budget Justification

1. Personnel \$702,811.00

The Maternal and Child Health Program supports 19 positions of which 11(58%) are vacant.

Salary \$571,931

Regular Salary	\$485,066
Salary Increments	\$ 11,338
Hazardous Pay	\$ 18,652
Incentive Pay	\$ 44,065
Certification Pay	\$ 12,810

Benefits \$130,880

Retirement	\$ 92,331
Medicare	\$ 7,199
Life Insurance	\$ 1,725
Hospital Insurance	\$ 23,976
Dental Insurance	\$ 5,649

2. Travel \$12,980.00

Off-island: \$11,000.00

Pacific Island Jurisdictions MCH Coordinator's Conference: \$2,500.00

Air Fare: Guam/Honolulu/Guam	\$1,800.00
Per Diem x 4 days x 1 person @ \$175	\$ 700.00

Association of Maternal and Child Health Program (AMCHP): \$3,300.00

Air Fare: Guam/Washington D.C./Guam	\$2,600.00
Per Diem x 4 days x 1 person @ \$175	\$ 700.00

Annual Grant Review Meeting: \$2,700.00

Air Fare: Guam/San Francisco./Guam	\$2,000.00
Per Diem x 4 days x 1 person @ \$175	\$ 700.00

Pacific Island MCH/Family Planning Institute Conference: \$2,500.00

Air Fare: Guam/Honolulu/Guam	\$1,800.00
Per Diem x 4 days x 1 person @ \$175	\$ 700.00

Local Mileage Reimbursement: \$1,980.00

The MCH Program is requesting local mileage reimbursement for personnel funded by the Grant. The personnel conduct outreach activities and presentations at schools, villages and different agencies within the Government of Guam. The amount reflects an average of 1,100 miles per year at the current rate of the Government of Guam of 30¢ per mile per individual.

3. Contractual

\$45,500.00

Contractual services are budgeted for the development of educational materials to increase public awareness and education on Maternal and Child health issues. Contractual services are needed for broadcasting of radio and television commercial spots for Maternal and Child Health. In addition, funding is requested for translation of educational materials into various languages to strengthen awareness of Maternal and Child Health services throughout the community.

Contractual services are budgeted to conduct the Women's Health Section of the Behavioral Risk Factor Surveillance System (BRFSS). This population-based questionnaire is conducted every month. There are eleven (11) questions asked via random dialing system. The cost is \$1,000 per question (which is the standard in the United States). Specialized analysis would be conducted for the Maternal and Child Health identified sub-populations.

Children with Special Health Care Needs Services: Contractual services are budgeted for the Children with Special Health Care Needs whose families and/or caretakers can not afford to purchase them. These would include assistive devices and specialty laboratory requests.

Brochures/Pamphlets @\$500.00 (per 2,000) x 40 subjects= \$20,000.00

30 second TV advertisements 3 stations = \$6,000.00

30 second Radio advertisements 5 stations =\$6,000.00

Behavioral Risk Factor Surveillance System (11 questions x \$1,000)= \$11,000.00

CSHCN Contractual Needs = \$2,500.00

4. Supplies \$8,900.00

Consumables are budgeted for the day-to-day operation of the Maternal and Child Health Program. In addition, expendable medical supplies are budgeted for the provision of patient care.

5. Equipment \$10,500.00

Educational books, videos, tapes and visual models are budgeted to carry out the health education and prevention aspect of the Maternal and Child Health Program.

In addition, professional books and educational material are budgeted for program staff to keep abreast of the latest trends and technology.

6. Capital Outlay \$4,900.00

Medical equipment has been budgeted for replacement in the Maternal and Child Health clinics.

Microscope @ \$1,000

Refrigerator for storing Vaccines and HCG tests \$1,000

Funding is requested to purchase one Laptop computer to be used as part of the Community-Based Outreach activities, Presentation will be held at schools, Mayors Offices and Government of Guam agencies and Departments. Presentation will be presented on a Multi-media projector system and a Laptop is an integral part of this activity.

Laptop Computer @ \$2,500.00

Software \$ 400.00

7. Communication \$150.00

Long distance telephone and facsimile correspondence will be needed for issues and concerns related to the Maternal and Child Health Program.

8. Indirect Cost \$70,281.00

This rate reflects the indirect cost of 10%.

Total Direct Cost	\$785,741.00
Indirect Cost	\$ 70,281.00
Total Request	\$856,022.00

3.2 CORE HEALTH STATUS INDICATORS:

➤ *The rate per 10,000 hospitalizations for Asthma among children less than five years old.*

The Guam MCH Program does not have the total number of hospitalizations for asthma as the primary cause for hospitalization.

Asthma:

Access to and utilization of appropriate medical care can prevent severe episodes of asthma in many cases. Asthma is one of the most common chronic diseases in childhood, and is generally managed via outpatient care. Hospitalization for asthma may indicate that the child has not had adequate outpatient management for the disease.

The data presented is based on discharges and not the number of patients. Numbers shown can represent multiple visits for the same patients.

**Guam Memorial Hospital Authority
Discharge Data
Calendar Year 1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age							
Asthma w/o status	204	144	197	1.36	60	195	3.25
Asthma w status	5	5	10	2.0	0	0	.00
Total	209	149			60		
Age Group 1-9 years of age							
Asthma w/o status	610	513	572	1.11	97	131	1.35
Asthma w status	18	18	43	2.38	0	0	.00
Total	628	531			97		
Age Group 10-19 years							

of age							
Asthma w/o status	187	159	162	1.01	28	35	1.25
Asthma w status	9	9	25	2.77	0	0	.00
Total	196	168			28		
Total Hospital Discharges Asthma	1,033						

Source: Guam Memorial Hospital Authority Medical Records Section

1999 Civilian Population Children less than age five

	1994	1995	1996	1997	1998	1999
<1	4,335	4,255	4,145	4,247	4,199	4,212
1-4	15,180	15,761	16,097	16,263	16,509	16,575
Total	19,515	20,016	20,242	20,510	20,708	20,787

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

- ***The percent Medicaid enrollees whose age is less than one year during the reporting year who received at least one type periodic screen.***

In 1998, there were 585 individuals eligible for EPDST. Of the 585, 160 eligible individuals received at least one initial or periodic screening. Thus, the percent of would be 27.4%.

- ***The percent Children Health Insurance Program (CHIP) enrollees whose age is less than one year during the reporting year who received at least one periodic screen.***

Federal law established a minimum benefit package that must be available to all children and adolescents who are eligible for Medicaid. This federally mandated Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program includes periodic comprehensive physical and mental health assessments that must be provided in accordance with a schedule developed by states in consultation with professional child health organizations. Under Medicaid EPSDT, states are required to provide a comprehensive range of early detection and prevention services that includes health assessment, screening and support services; comprehensive acute and chronic care; medical, dental, vision, hearing and well-child check up; immunizations; lab tests and health education. EPSDT requires states to provide children and adolescents with

services that are “medically necessary” in order to treat physical and/or mental conditions identified through EPDST screenings.

The island of Guam applied for the Children’s Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide similar benefits to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

- ***The percent of women with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck index.***

Prenatal Care:

Although starting prenatal care as early as possible during a pregnancy is believed to foster the most healthful birth outcome for both mother and infant, sizable shares of mothers-to-be do not initiate prenatal care in the first trimester.

**Birth By Prenatal Care of Mother
Guam**

	1994	1995	1996	1997	1998	1999
Total Live Births	4,427	4,189	4,265	4,318	4,322	4,039
1 st Trimester	66%	69%	66%	69%	62.65%	62.0%
2 nd Trimester	25.5%	21%	23%	25%	23.90%	24.1%
3 rd Trimester	4%	4%	5%	4.9%	8.60%	5.0%
No PN Care	4%	5%	6%	0.6%	4.72%	8.9%
Unknown	0	1%	2%	9%	.11%	.27%

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

The proportion of women reporting no prenatal care in 1999 increased by over 88% from 1998, while the percent of women beginning care in the third trimester decreased

by nearly 42%. The proportion of women seeking care in the first trimester continues to decline.

- *The percent of live births weighing less than 2,500 grams.*
- *The percent of all live singleton births weighing less than 2,500 grams.*
- *The percent of live births weighing less than 1,500 grams.*
- *The percent of live singleton births weighing less than 1,500 grams.*

Low birth weight is the factor most closely associated with neonatal mortality. Low birth weight infants are more likely to experience long-term disabilities or to die during the first year of life than are infants of normal weight.

Very low birth weight infants who survive are at significantly increased risk of severe problems, including physical and visual difficulties, developmental delays and cognitive impairment requiring increased levels of medical, educational, and parental care.

**Percent of Live Singleton Births weighing Less than 2500 Grams
Guam 1994-1999**

Year	Percent	Number	Singleton Live Births with weight	Total Singleton	Unknown
1994	5.8%	254	4361	4361	0
1995	7.1%	294	4139	4143	4
1996	6.7%	281	4203	4211	8
1997	6.6%	279	4253	4262	9
1998	6.7%	285	4241	4244	3
1999	7.3%	291	3980	3981	1

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

In 1999, the percent of live births weighing less than 2,500 grams and the percent of all live singleton births weighing less than 2,500 grams was 7.3%.

**Percent of Live Singleton Births weighing Less than 1500 Grams
Guam 1994-1999**

Year	Percent	Number	Singleton Live Births with weight	Total Singleton	Unknown
1994	0.6%	25	4361	4361	0
1995	0.8%	35	4139	4143	4
1996	0.8%	32	4203	4211	8
1997	0.7%	30	4253	4262	9
1998	0.6%	26	4241	4244	3
1999	0.7%	27	3980	3981	1

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

In 1999, the percent of live births weighing less than 1500 grams and the percent of all live births weighing less than 1500 grams was 0.7%.

A number of risk factors for low birth weight have been identified including younger and older maternal age, high parity, poor reproductive history, low socio-economic status, low levels of education, late entry into prenatal care, smoking and substance abuse.

➤ ***Comparison of health status indicators for Medicaid, non-Medicaid, and all populations in the State.***

Guam birth certificate do not have a payment source on the certificate, nor are the Medicaid files linked to the birth certificates.

➤ ***The percent of poverty level for eligibility in the State’s Medicaid and CHIP programs for infants, children and pregnant women.***

Poverty is the single most powerful influencer of poor health among families. Children living in poverty are exposed more frequently to such adverse conditions as poor nutrition. Learning disabilities, otitis media and other infectious conditions are more common among poor families. Children living in families who are poor are more likely than children living in other families to have difficulty in school, to become teen parents and, as adults, to earn less and be unemployed more frequently. (Duncan G, and Brooks-Gunn, J. 1997)

In 1990, the population of Guam stood at 133,152 with an estimated 15% of the population in poverty.

**Estimates of the Population in Poverty
1998- Guam**

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 16,655	910	3,576
Total	8,557	33,629

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Percent of the population in poverty equates to 22.5%

125% of Poverty - \$20,819

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,279	8,956
\$20,000 – 20,819	414	1,627
Total	10,340	40,636

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Percent of the population in poverty equates to 27.2%

200% of Poverty - \$33,310

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,749	10,804
\$20,000 – 20,819	5,056	19,870
\$20,000 – 33,310	1,412	5,549
Total	16,864	66,276

Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Percent of the population in poverty equates to 44.4%

On Guam, there were 19,989 families with 46,424 children under 18 in 1990 whose income was examined to determine poverty status. Of these children, 8,756 (18.9%) were living in families/households with income at or below poverty level.

➤ **The ability of States to assure Maternal and Child Health program access to policy and program relevant information.**

Data Bases or Surveys	Questions			
	Does your State perform this function?	Does your MCH Program have direct access to reports?	Does your MCH program have the ability to obtain analyses for programmatic or policy purposes?	Does your MCH Program have direct electronic database for analysis?
Annual Data Linkages				
Annual linkages of infant birth and infant death certificates	1	1	3	1
Annual linkages of birth certificates and Medicaid paid claims or eligibility files	1	1	1	1
Annual linkage of birth records and WIC eligibility files	1	1	1	1
Annual linkages of birth records and newborn screening files	1	1	2	1
Registries and Surveys				
Hospital discharge survey with at least 90% of in-State discharges	1	1	1	1
Annual birth defects surveillance system	1	1	1	1
Survey of recent mother at least every two years	1	1	1	1
Survey of adolescent health and behaviors at least every two years	1	1	2	1

- 1= No, the State or MCH agency does not provide this function or assure that this function is completed.
- 2= Yes, the State or MCH agency sometimes provides or assures this function is provided but not on a consistent basis.
- 3= Yes, the State or MCH agency regularly provides or assures the provision of this function

DEVELOPMENTAL HEALTH STATUS INDICATORS:

- ✿ *The death rate per 100,000 due to unintentional injuries among children aged 14 and younger.*

Death resulting from injury is one of the most profound public health issues facing children in the United States today.

Year	Deaths	Population Ages 0-14	Death Rate per 100,000
1994	9	46,146	19.5
1995	10	47,343	21.1
1996	9	48,421	18.6
1997	3	49,604	6.0
1998	9	51,164	17.6

The deaths of young adolescents, older adolescents and young adults are more likely to be due to external causes than to congenital diseases.

Age Specific Deaths 1994 - 1998

Age	1994	1995	1996	1997	1998	5 year total
< 1	42	38	38	38	37	193
1 - 4	10	6	6	6	9	37
5 - 9	6	4	8	2	12	32
10 - 14	6	7	4	2	9	28
15 - 19	10	9	9	11	11	50
20 - 21	8	5	7	12	9	41
Total	82	69	72	71	87	381

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Age Specific Death Rate 1994 – 1998

AGE	1994	1995	1996	1997	1998
1	9.689	8.931	9.168	8.712	8.651
1 – 4	0.659	0.381	0.373	0.369	0.545
5 – 9	0.424	0.272	0.517	0.123	0.691
10 – 14	0.481	0.555	0.315	0.156	.0691
15 – 19	0.924	0.835	0.827	0.992	0.961
20 – 21	1.927	1.246	1.796	3.108	2.277
Total	1.342	1.111	1.139	1.084	1.307

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

Leading Causes of Death

Less than One Year Old

Cause	1994	1995	1996	1997	1998	5-yr total
Perinatal Conditions	16	16	21	13	10	76
Congenital Anomalies	11	5	3	8	5	32
Pneumonia	3	1	1	1	2	8
All Other	1	1	1	0	0	3
Accidents						
All other causes	11	15	12	16	10	193
Total	42	38	38	38	27	312

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

1-4 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
All Other	2	2	2	0	3	9
Accidents						
Congenital Anomalies	0	1	3	2	1	7
Motor Vehicle	1	2	0	0	0	3
Accidents						
All other causes	7	1	1	4	5	37
Total	10	6	6	6	9	56

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

5-9 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
All Other Accidents	2	2	2	1	0	7
Motor Vehicle Accidents	1	0	1	0	2	4
Malig. Neoplasm	0	1	3	0	0	4
All other causes	3	1	2	1	5	32
Total	6	4	8	2	7	47

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

✿ The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among children aged 14 years and younger.

Approximately 50% of all deaths to children are due to injuries and approximately 80% of these are from motor vehicle crashes. Injury is one of the most serious, economic, and medical problems of our time.

Auto fatalities ranked as one of Guam's top ten leading causes of death to adults under the age of 25, and accidents in general ranked as one of the top ten leading causes of death to children under the age of 14.

In 1998, there were an estimated 51,164 children aged 14 and under. There were six deaths (five auto collision and one auto/pedestrian) to children aged 14 and under; this resulted in a rate of death due to motor vehicle crashes of 11.73 per 100,000 children.

Preliminary data for 1999 indicates that there were an estimated 52,631 children aged 14 and under. As of December 25, 1999, there were six deaths (two auto/pedestrian; one auto/auto collision and one auto off roadway/collision with concrete utility pole which resulted in three deaths) this brought the rate of death due to motor vehicle crashes to 11.40 per 100,000 children.

The increase in population on Guam with its steady increase in the number of drivers and vehicles on the roadways, and the inability of the present highway infrastructure to accommodate the increase, has contributed significantly to the increase in motor vehicle crashes, and with it, increased health and economic cost associated with the injuries and death from motor vehicle crashes.

15-19 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
Motor Vehicle Accidents	3	2	2	3	5	15
Suicide Accidents	2	2	4	4	3	15
Total	2	3	2	2	0	9
	7	7	8	9	8	39

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

20-21 Years Old

Cause	1994	1995	1996	1997	1998	5-yr total
Motor Vehicle Accidents	1	2	2	2	4	11
Suicide	2	0	1	1	5	9
Homicide	2	0	0	1	0	3
Heart Disease	1	1	1	0	0	3
Total	6	3	4	4	9	26

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

- ✿ ***The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among youth aged 15 through 24 years.***

In 1998, there were an estimated 20,839 individuals aged 15 through 24 years old. There were nine deaths to individuals aged 15 through 24 years old; this resulted in a rate of death due to motor vehicle crashes of 43.18 per 100,000 individuals.

- ✿ ***The rate per 100,000 of all nonfatal injuries among children aged 14 years and younger.***
- ✿ ***The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among children aged 14 years and younger.***
- ✿ ***The rate per 100,000 of nonfatal vehicle crashes among youth aged 15 through 24 years.***

Motor Vehicle Accidents:

Seat belts and other retention devices, when used properly, have proven highly effective in preventing fatalities and serious injuries among children and adults.

**Hospital Discharge Data
Motor Vehicle Accidents
1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age Motor Vehicle "Accidents"	5	0	0	0	5	0	1.00
Age Group 1-9 years of age Motor Vehicle "Accidents"	65	0	0	0	65	0	1.21
Age Group 10-19 years of age Motor Vehicle "Accidents"	157	0	0	0	157	0	1.59

Source: Guam Memorial Hospital Authority Medical Records Section

Choking/Suffocation:

Most suffocation fatalities occur when children choke on small round objects. Other child suffocation deaths typically are caused by such objects as plastic bags, bedclothes, the sides of cribs and playpens, safety gates and entrapments in refrigerators and other appliance.

**Hospital Discharge Data
Choking/Suffocation
1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age Choking/Suffocation	3	0	0	.00	3	1	1.00
Age Group 1-9 years of age Choking/Suffocation	3	0	0	.00	3	1	1.00
Age Group 10-19 years of age Choking/Suffocation	1	0	0	.00	1	1	1.00

Source: Guam Memorial Hospital Authority Medical Records Section

Burns:

Burns to children and adolescents frequently result from parental neglect or distraction. A high number are, therefore, preventable.

Smoke detectors have become more common in homes. They are inexpensive, reliable devices, which has led them to become, perhaps, the most widely used fire prevention devices.

**Hospital Discharge Data
Burns/Scalds
1999**

	Total Patients	Total Dx as Primary	Days as Primary Dx	Average length of stay as primary Dx	Total Dx as second	Days as second Dx	Average length of stay as second Dx
Age Group 0-12 months of age Burns/Scalds	2	0	0	.00	2	1	1.00
Age Group 1-9 years of age Burns/Scalds	10	0	0	.00	10	2	1.5
Age Group 10-19 years of age Burns/Scalds	12	0	0	.00	12	4	1.00

Source: Guam Memorial Hospital Authority Medical Records Section

✿ The rate per 1,000 women aged 15 through 19 years with a reported case of Chlamydia.

Chlamydia is the most common STD among teenagers. Chlamydia can also cause various other diseases. For males, Chlamydia can often cause urethritis. In females, it can lead to pelvic inflammatory disease (PID) and increase risk of infertility.

✿ The rate per 1,000 women aged 20 through 44 years with a reported case of Chlamydia

Chlamydia is the most common sexually transmitted disease (STD) in the United States and Guam. According to the 1997 CDC Sexually Transmitted Disease Surveillance Report, of the reported cases of Chlamydia by state/area, ranked according to rates, Guam ranked number nine in the United States and outlying areas.

Overall, Chlamydia incidence rose by 26% from 121.1 cases per 100,000 population in early 1998 to 152.9 in early 1999. By sex, females had a lower increase than males, but their incidence rates were consistently much higher than those for males. In early 1998, males had a incidence rate for Chlamydia of 24.4 cases per 100,000 males while females were at 221.0 cases per 100,000 females. In early 1999, males had increased their rate by 35%, to 32.9 cases per 100,000; females had increased by 29% to 285.1 cases per 100,000. Nearly all ethnic groups had increased rates of Chlamydia, with only Marshallese and Chinese having no cases in 1999. The lowest percentage increase was in the Chamorro group, which went from 114.7 cases per 100,000 to 119.4, while the highest incidence was in the Black population, which increased by 342%. The Black

population is very small on Guam, so this increase is more a function of these numbers, rather than an epidemic of Chlamydia.

✿ ***The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year.***

Federal law established a minimum benefit package that must be available to all children and adolescents who are eligible for Medicaid. This federally mandated Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program includes periodic comprehensive physical and mental health assessments that must be provided in accordance with a schedule developed by states in consultation with professional child health organizations. Under Medicaid EPSDT, states are required to provide a comprehensive range of early detection and prevention services that includes health assessment, screening and support services; comprehensive acute and chronic care; medical, dental, vision, hearing and well-child check up; immunizations; lab tests and health education. EPSDT requires states to provide children and adolescents with services that are “medically necessary” in order to treat physical and/or mental conditions identified through EPDST screenings.

✿ ***The percent of adolescents in grades 9 through 12 who reported using tobacco products in the past month.*** Tobacco use is the most preventable cause of death in the United States. Substance abuse, including tobacco use and nicotine dependence, is associated with a variety of other serious health and social problems.

✿ ***Infants and children aged 0 through 24 years enumerated by subpopulations of age group, race, and ethnicity.***

	<10	10-14	15-17	18-19	20-24	>24	Total
Males	1,293	344	301	184	1,026	5,237	8,385
Non-Hispanic White							
Black	155	17	84	51	245	559	1,111
Hispanic	0	0	0	0	0	0	0
Others	19,145	6,506	3,342	1,974	3,136	36,076	70,179
Females	1,326	347	145	88	436	2,740	5,082
Non-Hispanic White							
Black	155	17	26	16	75	295	584
Hispanic	0	0	0	0	0	0	0
Others	17,168	6,158	3,416	2,135	4,646	33,101	66,624
Total	39,242	13,389	7,314	4,448	9,564	78,008	151,965

✿ ***Geographic living area for all children aged 0 through 19 years.***

Guam is an ethnically diverse community of approximately 151,965 persons (1999 mid-year estimate, Office of Planning and Evaluation, Department of Public Health and Social Services). The population of Guam is relatively young, 34.5% being below the age of 15, compared to 21.4% of the U.S. population according to 1999 U.S. Bureau of Census estimates. Guam is divided into 22 villages and 19 election districts. Because many of the villages have small populations, for statistical purposes, the island is frequently divided into Northern, Central and Southern regions.

Northern Guam is the fastest growing region of the island, the population having increased by 32% between 1980 and 1990. Yigo and Dededo have rapidly expanding urban centers surrounded by suburban sections, underdeveloped land, and small family “ranches”. Tamuning is largely urban and commercial with little remaining undeveloped land. Tamuning is also the site of Guam’s only civilian hospital and many of the medical clinics of the island.

Much of Guam’s Central region is suburban, although Guam’s capital city of Hagåtña, which is largely commercial and has multi-family dwellings, lies in this region. Southern Guam is the islands least developed and most traditional region, each small urban center being surrounded by extensive undeveloped or farming land.

The U.S. Census Bureau definition of rural and urban communities (communities having a population of 2,500 or more are considered urban) is not appropriate for Guam. Using this definition, Guam’s capital city of Hagåtña, would be considered a rural community while Inarajan, one of Guam’s most traditional villages and an important agricultural area, would be considered urban.

Ethnicity of Guam by Region – 1999

	North	Central	South	Total
Asian-Pacific	61,458	45,914	24,153	131,526
Chamorro	23,567	30,365	20,726	74,658
Filipino	26,560	8,519	2,088	37,167
Federated States of Micronesia	2,186	3,180	687	6,053
Marshallese	67	161	11	239
Palauan	982	765	174	1921
Japanese	2,499	628	178	3,305
Other Asian	5,598	2,296	289	8,183
White	7,077	764	5,626	13,467
Black	890	98	707	1695
Others	3,087	1,188	1,003	5,278
Total	72,513	47,963	31,489	151,965

Source: Department of Public Health & Social Services, Office of Planning and Evaluation

✿ Percent of the State population at various levels of the federal poverty level.

✿ Percent of the State population aged 0 through 19 years at various levels of the federal poverty level.

Poverty is the single most powerful influencer of poor health among families. Children living in poverty are exposed more frequently to such adverse conditions as poor nutrition. Learning disabilities, otitis media and other infectious conditions are more common among poor families. Children living in families who are poor are more likely than children living in other families to have difficulty in school, to become teen parents and, as adults, to earn less and be unemployed more frequently. (Duncan G, and Brooks-Gunn, J. 1997)

In 1990, the population of Guam stood at 133,152 with an estimated 15% of the population in poverty.

On Guam, there were 19,989 families with 46,424 children under 18 in 1990 whose income was examined to determine poverty status. Of these children, 8,756 (18.9%) were living in families/households with income at or below poverty level.

In 1998, \$16,655 was the estimated income threshold for a family of 4 to be in poverty. Average household size on Guam in 1998 was 3.93 persons. Estimates of the Population in Poverty

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
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\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,279	8,956
\$20,000 – 20,819	414	1,627

Total	10,340	40,636
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Source: Office of Planning and Evaluation, Dept. of Public Health & Social Services

Percent of the population in poverty equates to 27.2%

200% of Poverty - \$33,310

Household Income	Number of Household	Estimated Population
No income	1,327	5,215
Under \$3,000	1,074	4,221
\$3,000 – 4,999	822	3,230
\$5,000 – 6,999	758	2,979
\$7,000 – 8,999	916	3,600
\$9,000 – 10,999	948	3,726
\$11,000 – 12,999	1,138	4,472
\$13,000 – 14,999	664	2,610
\$15,000 – 19,999	2,749	10,804
\$20,000 – 20,819	5,056	19,870
\$20,000 – 33,310	1,412	5,549
Total	16,864	66,276

Percent of the population in poverty equates to 44.4%

Performance Measure Summary Sheet

Performance Measure	Pyramid Level of Service				Type of Service		
	DHC	ES	PBS	IB	C	P	RF
2. The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients.	X				X		
3. The percent of Children with Special Health Care Needs (CSHCN) in the State who have a "medical/health home."		X			X		
4. Percent of newborns in the State with at least one screening for each PKU, hypothyroidism, galactosemia, hemoglobinopathies.			X		X		
5. Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B.			X				X
6. The birth rate (per 1,000) for teenagers aged 15 through 17 years.			X				X
7. Percent of third grade children who have received protective sealants on at least one permanent molar tooth.			X				X
8. The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children.			X				X
9. Percentage of mothers who breastfeed their infants at hospital discharge.			X				X
10. Percentage of newborns who have been screened for hearing impairment before hospital discharge.			X				X
11. Percent of Children with Special Health Care Needs (CSHCN) in the State CSHCN Program with a source of insurance for primary and specialty care.				X	X		
12. Percent of children without health insurance.				X	X		
Performance Measure	Pyramid Level of Service				Type of Service		
	DHC	ES	PBS	IB	C	P	RF
14. The degree to which the State assures family participation in program and policy activities in the State CSHCN program.				X		X	
15. Percent of very low birth weight				X			X

<i>live births.</i>							
<i>16. The rate (per 100,000) of suicide deaths among youths 15-19.</i>				X			X
<i>18. Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.</i>				X			X

DHC = Direct Health Care ES=Enabling Services PBS=Population Based Services
 IB= Infrastructure Building C=Capacity P=Process RF=Risk Factor

Note: Guam was excluded from performance measures #1 and #17.

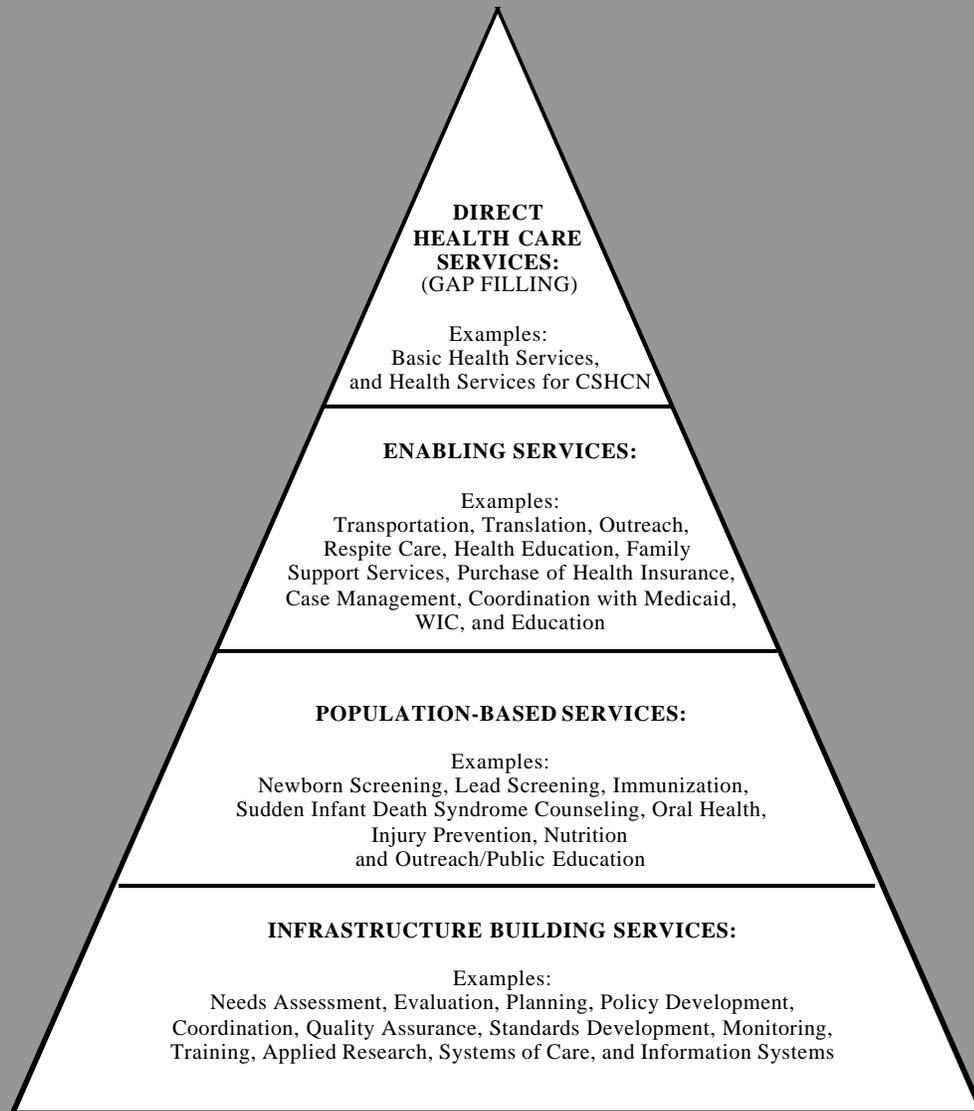
Negotiated Performance Measures

Performance Measure	Pyramid Level of Service				Type of Service		
	DHC	ES	PBS	IB	C	P	RF
<i>1. percent of adolescents aged 12 through 17 on substance use/abuse</i>		X					X
<i>2. Percent of children younger than age 18 maltreated/neglected</i>			X				X
<i>3. Percent of Chlamydia Trachomatis infection in women under the age of 25.</i>	X						X
<i>4. Percent of childbearing age women screened for cervical cancer.</i>			X				X
<i>5. To improve the referral system of infants under the age of one year to the DPHSS CSHCN Program for entry into the CSHCN registry.</i>				X	X		
<i>6. Prevalence of childhood obesity among Kindergarten students.</i>				X	X		
<i>7. Percent of high school students who reported engaging in violence or in behaviors resulting from violence on school property.</i>			X				X

DHC = Direct Health Care ES=Enabling Services PBS=Population Based Services
 IB= Infrastructure Building C=Capacity P=Process RF=Risk Factor

Figure 2

CORE PUBLIC HEALTH SERVICES DELIVERED BY MCH AGENCIES



The Guam Maternal and Child Health Program has developed the following priority needs for the island of Guam:

- I. Percent of adolescents aged 12 through 17 with substance use/abuse

Type: Risk Factor
Category: Enabling Services

- II. Percent of children younger than age 18 maltreated/neglected.

Type: Risk Factor
Category: Population Based Services

- III. Percent of Chlamydia Trachomatis infections in women under the age of 25.

Type: Risk Factor
Category: Direct Health Care

- IV. Percent of childbearing age women screened for cervical cancer.

Type: Risk Factor
Category: Population Based Services

- V. To improve the referral system for infants under the age of one to the Department of Public Health and Social Services, Children with Special Health Care Needs (CSHCN) Program for entry into the CSHCN Registry.

Type: Capacity
Category: Infrastructure Building Services

- VI. Percent of high school students who reported engaging in violence or in behaviors resulting from violence on school property.

Type: Risk Factor
Category: Population Based Services

3.3 Performance Measures

3.4.1 National “Core” Performance Measures

3.4.2 State “Negotiated” Performance Measures

3.4.2.1 Development of State Performance Measures

3.4.2.2 Discussion of State Performance Measures

3.4.3 Outcome Measures

DIRECT HEALTH CARE

National Performance Measures 01 and 02 address direct health care services for Children with Special Health Care Needs. State Performance Measure 04 addresses 1) preventive and primary care services for pregnant women, mothers and infants; and 2) preventive and primary care services for children.

Performance Measure #01

The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.

The island of Guam was excluded from reporting on this measure. The island does not have a Supplemental Security Income (SSI) Program to provide rehabilitation services to individuals under the age of sixteen with disabilities. Moreover, the Medicaid (MAP) and local Medically Indigent Program (MIP) do not have any provisions for these services.

Performance Measure #02

The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty or subspecialty services, including care coordination not otherwise accessible or affordable to its clients.

In order to meet the target of four (4), the Children with Special Health Care Needs (CSHCN) component of the Maternal and Child Health (MCH) Program will continue current services provided or paid for. There is no plan to routinely provide or pay for occupational/physical therapy services or respiratory services, although it may be done as an exception. When these services are not accessible or affordable, families are assisted in seeking resources or insurance coverage. The implementation of the State Child Health Insurance Program (SCHIP) will decrease the number of children who are uninsured and allow current resources to be directed toward reaching uninsured children.

State Performance Measure #04

***The percent of Chlamydia
Trachomatis infections in women
under the age of 25.***

Access to family planning services through reduction of financial, infrastructure, cultural and language barriers, as well as through promotion of awareness and understanding in the community, is crucial to the prevention of sexually transmitted diseases (STDs).

During Fiscal year 2001, family planning services will continue to provide direct health services in the form of comprehensive clinical services. These will include contraceptive supplies, STD screening/treatment and cervical and breast cancer screening.

Enabling services will include health education and linkage to address other medical and psychosocial issues. Family planning staff will continue to provide referral and follow up regarding cancer and STD screening which will include partners.

ENABLING SERVICES:

National Performance Measure 03 addresses enabling services for Children with Special Health Care Needs. State Performance Measure 01 addresses enabling services for 1) preventive and primary care services for pregnant women, mothers and infants and 2) preventive and primary care services for children.

Performance Measure #03

***The percent of Children with Special
Health Care Needs (CSHCN) in the
State who have a “medical/health
home”.***

Health care for the island's CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), the Medicaid Program (MAP) and through local health maintenance organizations (HMO's) and private clinics under self-pay. Public health nursing personnel conduct case findings and make appropriate referrals to the MIP and MAP.

The goal of the CSHCN component is to ensure access to quality comprehensive, community-based health care systems for all infants, children, and adolescents with special health care needs.

To further develop the performance objective, the Children with Special Health Care Needs (CSHCN) component of the Maternal and Child Health (MCH) Program needs to acquire broader baseline information. A plan for acquiring data will be developed with other programs and organizations. The plan will define “medical/health home” and “CSHCN”, determine sources of data and methodology to obtain and analyze data collected.

State Performance Measure #01

The percent of adolescents aged 12 through 17 with substance use/abuse.

Data from the Guam Youth Risk Behavior Survey will be utilized to track the frequency of self-reported substance usage by teenagers in Guam schools.

The activities for this measure fall within a system of strategies to address adolescent health and well being. Health education and other information sharing efforts will continue to be high priority. Printed materials and education information related to drugs, alcohol, and tobacco use will be readily available. Staff from MCH will also be involved in the development of public services announcements in the prevention of drug and alcohol use by teenagers.

Since prevention of youth substance abuse must be address through holistic approaches, the MCH Program will coordinate with other agencies such as the Department of Mental Health and Substance Abuse, the Department of Youth Affairs and Sanctuary to collect data on what services are currently being provided to adolescents and what additional needs remains.

POPULATION BASED SERVICES:

National Performance Measures 04, 05, 06, 07, 08, 09 and 10 and State Performance Measures 08, 02 and 05 address population based services for the following population groups:

Primary and Preventive Care for Pregnant Women, Mothers and Infants:

Performance Measure #06

The rate of birth (per 1,000) for teenagers aged 15 through 17 years.

For fiscal year 2001, the target is 41.00 births per 1,000 teenagers aged 15 through 17 years old. As teen pregnancy is known to be surrounded by larger issues, activities will occur on a variety of levels through a holistic adolescent wellness approach for the reduction of teen births.

Direct services will include comprehensive family planning clinical services including contraceptive services and supplies to teens under the age of eighteen. Enabling services include island wide health education on family planning, healthy relationships, abstinence and postponing sexual involvement. Population based services include health education on topics such as drugs/alcohol/tobacco, teen pregnancy, STD/HIV, suicide, sexual assault and personal/social skills development. A grant application has been submitted to continue the Abstinence Only Education Program. This will be a community based abstinence only education awareness campaign. Infrastructure services include technical assistance to family planning staff and providers to develop

strategies to provide information/outreach to teens, and to improve access and clinical services for teens. The MCH Program along with other community partners will continue to support the implementation of the Youth Risk Behavior Survey (YRBS) in the middle and high schools on Guam. These results provide information for school/community planning to prevent teen pregnancy.

Performance Measure #09

The percentage of mothers who breastfeed their infants at hospital discharge.

The annual target of 20% of mothers who breastfeed their infants at hospital discharge will be maintained. Current data on mothers in Guam who breastfeed their infants is only being collected on mothers enrolled in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). In order to meet the target of 20%, MCH clinical staff will continue to provide breastfeeding education to women seen in the clinics. MCH will further collaborate with the WIC Program to provide breastfeeding presentations to the clinicians as part of continuing education. Furthermore, the Island wide Breastfeeding Coalition will continue providing support to breastfeeding mothers through the hotline as well as educational activities.

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaign. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive coordinated, family-centered, and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention and 9) child abuse prevention.

State Performance Measure #05 ***Percent of childbearing age women who have been screened for cervical cancer.***

The Department of Public Health and Social Services, Bureau of Community Health Services applied and received funding to implement the Breast and Cervical Cancer Early Detection Program. The overall goals of the program are: 1) to increase the regular use of cancer screening and diagnostic service by low income women who are uninsured and underinsured; 2) to provide for public information, education and outreach; 3) to provide a system for referral, follow-up, tracking, surveillance. Monitoring and case management; 4) to provide for professional education on screening, re-screening and diagnostic procedures; 5) to monitor and evaluate the program's quality and effectiveness and 6) to consolidate these goals into an island-wide comprehensive cancer control plan developed with input from a community coalition.

Preventive and Primary Care Services for Children:

Performance Measure #05 ***Percent of children through age 2 who have completed immunizations for measles, mumps, rubella, polio, diphtheria, tetanus, pertussis and haemophilus influenza.***

In fiscal year 2001, the Title V Program will continue to work as a partner on the Immunization Coalition, which is coordinated by the Bureau of Communicable Disease Control (CDC) Immunization Program. This island wide coalition of public and private stakeholders will continue to work on population-based issues related to access, education, legislation, funding and with an emphasis on increasing the immunization levels on the island.

The MCH Program and the Bureau of Communicable Disease Control (CDC) Immunization Program provide year round immunization services. Immunization clinics are made accessible, available, and free of charge. Walk-in immunization clinics are provided at the Central Public Health Center and outreach immunization services are held within villages and public sites, such as shopping centers and mayor's offices, all in an effort to improve the immunity level of Guam's children.

Infrastructure building efforts will be to reassess Title V immunization efforts to determine which populations are most at risk for being under immunized. It is anticipated that the island's immunization tracking system will up to date in fiscal year 2001.

Performance Measure #07

Percent of third grade children who have received protective sealants on at least one permanent molar tooth.

The Dental Section of the Bureau of Community Health Services, Department of Public Health and Social Services, is responsible for the implementation of Guam Public Law 24-196 mandating basic dental care for Guam's eligible children below the age of 17 years. The scope of dental services provided includes examination, x-rays, diagnosis, cleaning and sealing of teeth, fluoride treatment, treatment planning and the performance of certain treatments as required. Orthodontic treatment, complicated oral surgery and root canal therapies of multi-rooted teeth are not performed, but appropriate referrals are made.

This section is also responsible for the education of the public health measures especially the optimal use of preventive measures, which include fluoride, sealants, and personal oral hygiene for the prevention of dental caries and periodontal disease.

The Title V and Dental Section of the Bureau of Community Health Services, Department of Public Health and Social Services will continue to provide dental health education on sealants to health care providers especially schools and community groups.

The Title V and Dental Section will also collaborate with the EPSDT Program to develop strategies to improve utilization of dental health services for the EPSDT population. The utilization for dental services for the EPSDT population is approximately 10%, which is inadequate. Furthermore, the MCH Program will collaborate with the WIC Program to promote proper feeding practices to prevent baby bottle tooth decay.

In addition, the Title V Program will work with the Dental Section of the Bureau of Community Health Services, Department of Public Health and Social Services on the fluoridation of the water supply on the island. Island wide fluoridation of the water system was completed in 1996, but Guam Waterworks Authority (GWA) stopped the fluoridation of the water wells as of March 1, 1997, because of budget constraints. Fluoridation of the water system is one of the most efficacious and cost beneficial anti-decay regimens. The discontinuation of the fluoridation was brought up at a legislative oversight hearing in May 1998 where a request was made to fluoride the water wells again. Despite the request, GWA lacks funding to implement the procedure.

Performance Measure #08

The rate of death to children aged 1-14 caused by motor vehicle crashes per 100,000 children.

In 2001, the emphasis will be on a population-based partnership with the Preventive Health Block Injury Program Coordinator. The goals include prevention of traffic related and other types of injury through community participation and the initial focus will be on

traffic and pedestrian safety. The partnership also plans to eventually establish an integrated and comprehensive injury control system to determine the causation of injuries by use of data analysis. The essential ingredient of this system is to seek problems and solutions through citizen involvement and input.

Active participation will continue with community partners on education and advocacy regarding child safety issues. Injury prevention materials will continue to be distributed through a variety of community networking activities. In the area of infrastructure building, collaboration will continue with the Emergency Medical Services Administration Office, which include the Emergency Medical Services for Children.

State Performance Measure #02

Percent of children younger than 18 years old maltreated/neglected.

According to the Child Protective Services Office of the Department of Public Health and Social Services, the number and rate of reported incidents of child abuse and maltreatment have been steadily increasing.

The Title V Program will continue to participate in the I Familia-ta-Fine'neña (“Families First”) Coalition and the Domestic Violence Task Force to advocate a “Families First” perspective in the community and agencies that deal with families and children.

Public Law 24-239 (“Guam Family Violence Act of 1998”) addresses the dilemma of family violence on Guam by directing governmental resources towards controlling the behavior, providing civil statutes and court procedures for handling family violence and by providing educational programs for the agencies involved in addressing the problem.

There are various government and non-profit organizations within the community that will respond to domestic/family/child violence. They are:

- Alee Shelter – The shelter provides a safe haven for women and children. Alee Shelter provides emergency food, clothing, shelter and assistance in contacting other needed services. The location of the shelter is kept secret to protect the safety of persons using the shelter. Anyone who needs sanctuary from violence is eligible for the services of Alee.
- Crisis Hot Line: The Hot Line provides intervention, information, and referral on a 24-hour basis. All calls are confidential.
- Healing Hearts Crisis Center: Healing Hearts provides victims of sexual assault a supportive and gentle atmosphere to begin the healing process plus medical assistance and crisis counseling and referrals.
- VARO (Victim Advocates Reaching Out): VARO provides free, confidential, and voluntary services to any victim of family violence, sexual assault/abuse, physical abuse, and other violent or traumatic events.

State Performance Measure #08

Percent of high school students who reported engaging in violence or in behaviors resulting from violence on school property.

Data from the 1999 Guam Youth Risk Behavior Survey (YRBS) for grades 9 –12 in Guam schools indicate that 12% of high school youth were in a physical fight in the last 12 months. This is a decrease from the 1997 YRBS, which indicated that 16% of high school youth were involved in a physical fight in the last 12 months.

During fiscal year 2001, population based activities will take place primarily through collaboration with School Health Counselors through Peer Mediation activities.

Inafa' Maolek is a non-government, community-based, non-profit organization which promotes peace in the community. Inafa' Maolek was initiated by a local attorney and involves a network of volunteers which has been involving and training youth in peer mediation, date rape prevention and health education "community theatre" performances.

As part of infrastructure building activities, MCH will continue to strengthen partnerships with the Department of Education Curriculum and Instruction Health Advisory Committee for the deliverance of preventive health education information. The MCH Program will continue to strengthen linkages with community agencies to assure maximum use of resources and eliminate duplication of services.

Services for Children with Special Health Care Needs (CSHCN):

Performance Measure #04

Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, and hemoglobinopathies.

The annual performance objective for fiscal year 2001, is that 100% of the infants born on the island of Guam, who did not expire before newborn screening, will receive newborn screening for Phenylketonuria, hypothyroidism, galactosemia, and Hemoglobinopathies.

In order to meet this objective, the MCH Program has taken the lead to implement a tracking system for the Newborn Metabolic Screening Program. Guam Memorial Hospital Authority (GMHA) routinely conducts newborn metabolic screens for all neonates born at the GMHA. However, there was no mechanism in place for tracking babies with abnormal metabolic screens or any indication whether a repeat test or early intervention was done to the client. In 1998, MCH developed a disposition form for tracking abnormal screens done at GMHA and to ensure that the physicians (private

and public) do a repeat test as scheduled, confirm a diagnosis, and provide early intervention and treatment, as necessary.

Performance Measure #10

Percentage of newborns who have been screened for hearing impairments before hospital discharge.

The Guam Memorial Hospital Authority (GMHA) acquired the Distortion Product Otacoustic Emission Equipment (DPOAE). The newly acquired instrument was to be used by the GMHA Nursery nurses on newborns prior to discharge. Those failing or who were recommended for further evaluation, or those not seen for DPOES prior to discharge, are seen at the Pediatric Evaluation and Development Services (PEDS). Unfortunately, the testing tool at GMHA has malfunctioned and it is not known if replacement parts are available.

The University of Guam through the University Affiliated Program has express interest in the applying for a federal grant to implement a Newborn Hearing Screening Program, which would include identification, comprehensive evaluation, intervention, habilitation and monitoring. The grant would also provide the hospital with equipment, training and technical assistance for newborn hearing screening.

INFRASTRUCTURE BUILDING SERVICES:

National Performance Measures 11, 12, 13, 15, 16 and 18 and State Performance Measures 6 and 7 address Infrastructure Building Services for the following population groups as follows:

Primary and Preventive Care for Pregnant Women, Mothers and Infants:

Performance Measure #15

Percent of very low birth weight births.

The annual performance objective for fiscal year 2001 is to reduce the percent of very low birth weight live births to .70%. The MCH Program conducts an Early Prenatal Counseling Class (EPCC) that provides information on the adverse effects of alcohol, recreational drugs and tobacco usage during pregnancy. In addition, prenatal clients are assessed for unhealthy behaviors and health risks during the initial interview and examination.

The use of alcohol, tobacco, and illegal substance during pregnancy is a major risk factor for low birth weight and other poor infant outcomes.

The use of Crystal Methamphetamine (“ice”) has increased to epidemic proportions. This drug was first introduced to the island in 1990 and has become a drug of

preference. There are 3 main reasons for its popularity: 1) it is easily available and accessible; 2) users get a “high” that can last 12 to 14 hours from one “hit”; and 3) the price of the drug is cheaper than heroin and cocaine.

The Title V Program will increase the focus to reach women who delay prenatal care by taking the lead in developing a community wide effort to reach these women by bringing together organizations, agencies and individuals through the Healthy Mothers and Healthy Babies Coalition.

Performance Measure #18

Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

For fiscal year 2001, the MCH Program performance objective is to increase the number of infants born to women who receive prenatal care beginning in the first trimester to 75%. In 1999, 62% of the women received prenatal care in the first trimester. However, the proportion of women reporting no prenatal care increased over 88% from 1998, while the percent of women beginning prenatal care in the third trimester decreased by nearly 42%. The proportion of women seeking care in the first trimester on Guam continues to decline.

Outreach, education and counseling will be provided both to the community at large, providers and women of childbearing age of the importance of early and consistent prenatal care. In addition, outreach will be provided through the continued collaboration with the Healthy Mothers and Healthy Babies Coalition to advocate for and facilitate access to prenatal care for all pregnant women.

Title V staff will develop public awareness campaigns (radio and television) to alter all women to enter prenatal care as early as possible. The outreach will include presentations to schools, community organizations, business and employers.

The MCH Program will also work in partnership with the Family Planning Project to provide preconception counseling when birth control is sought and following a negative pregnancy test. If the results are positive, program staff will initiate prenatal counseling and referral to prenatal care.

Preventive and Primary Care Services for Children:

Performance Measure #12

Percent of children without health insurance.

The annual objective for fiscal year 2001 for this performance measure is that no more than 12% of the children on Guam be without health insurance.

The island of Guam applied for the Children's Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide benefits similar to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

Performance Measure #13

Percent of potentially eligible children who have a service paid by the Medicaid Program.

Guam's Department of Public Health and Social Services implements medical assistance programs, which strive to reach uninsured and underinsured women, infants, children and youth through programs such as the Maternal and Child Health (MCH) Program, the Medicaid Program (MAP) and the Medically Indigent Program (MIP).

The Department of Public Health and Social Services operates in three strategic locations, central, northern and southern Guam, which provide services to the entire population of the island, aside from services from private health providers. Public health nurses, school nurses, medical social workers and eligibility workers in the community inform and assist families and children in applying for medical assistance program(s) through community outreach dissemination.

Performance Measure #14

The degree to which the State assures family participation in program and policy activities in the State CSHCN Program.

Out of the possible eighteen points, the Guam MCH Program scored 10 points in 1999 and will maintain this objective for 2001. The Guam MCH Program mostly met the characteristics of (a) family members participate on advisory committees or task forces and are offered training, mentoring and reimbursement, when appropriate; (b) financial

support is offered for parent activities or parent groups; (c) family members are involved in the Children with Special Health Care Needs' elements of the MCH Block Grant Application process; (d) family members of diverse cultures are involved in in-service training of CSHCN staff and providers and (e) family members of diverse cultures are involved in all activities. The Guam MCH Program did not meet the characteristics of family members are hired as paid staff or consultants to the State CSHCN Program.

Performance Measure #16

The rate of suicide deaths among youth aged 15-19.

The annual objective for fiscal year 2001 is to reduce the rate of suicide deaths among youths aged 15 through 19 to 42 per 100,000 youths.

The MCH Program refers youth that express ideation of self-harm to Medical Social Services of the Department of Public Health and Social Services. The Social Worker then provides counseling, intervention, and/or referral to the Department of Mental Health and Substance Abuse for further evaluation and diagnosis.

As part of infrastructure building activities, MCH will continue to strengthen partnerships with the Department of Education Curriculum and Instruction Health Advisory Committee for the deliverance of preventive health education information. The MCH Program will continue to strengthen linkages with community agencies to assure maximum use of resources and eliminate duplication of services.

State Performance Measure #07

The development of a prevalence rate of childhood obesity at Kindergarten

As part of the Preventive Health Block Grant, the Bureau of Community Health Services, Nutrition Health Services has established "Team Nutrition". Team Nutrition is comprised of professionals that are experts in the field of nutrition both public and private. A resource guide was compiled and distributed to the public listing all the members of Team Nutrition.

The Title V Program will make available to professionals who work with children information on the signs and symptoms of eating disorders. Furthermore, the MCH Program will collaborate with Nutrition Health Services in the development of the State Plan for the WIC Program. Furthermore, MCH will work with the WIC Program to promote access to food and nutrition education to children and families.

Services for Children with Special Health Care Needs (CSHCN):

Performance Measure #11

Percent of Children with Special Health Care Needs (CSHCN) in the State CSHCN Program with a source of insurance for primary and specialty care

Health care for the island's CSHCN is currently provided through services from the MCH Program, the locally funded Medically Indigent Program (MIP), and the Medicaid Program (MAP) and through local health maintenance organizations (HMO's) and private clinics under self-pay. Public health nursing personnel conduct case findings and make appropriate referrals to the MIP and MAP.

The goal of the CSHCN component is to ensure access to quality comprehensive community-based health care systems for all infants, children, and adolescents with special health care needs.

The island of Guam applied for the Children's Health Insurance Program (CHIP) to provide expanded benefits under the Medicaid Program. On Guam, the CHIP is 35% locally and 65% federally funded. CHIP was established in 1998 to provide medical assistance to uninsured children of low-income families who are unable to afford the cost of private medical insurance.

The federal funding of \$1,494,062 (65% enhanced match rate) and local funding of \$804,495 provides total funding of \$2,298,557 to implement a CHIP that would provide benefits similar to those of Medicaid. Guam has elected to implement CHIP using the Medicaid expansion option.

State Performance Measure #07

To improve the referral system of infants under the age of one year to DPHSS, CSHCN Program for entry into the CSHCN Registry.

In existence is the 1997 Memorandum of Agreement (MOA) between the University of Guam, Guam University Affiliated Program, Department of Education, Special Education Division, Guam Memorial Hospital Authority, the Departments of Public Health and Social Services and Mental Health and Substance Abuse for the promotion and operation of the Pediatric Evaluation and Development Services (PEDS).

In 2000, the MOA is being revisited to clarify roles and responsibilities of the agencies involved. The following services are being reviewed: 1) early identification and tracking of infants at risk; 2) screening and referral; 3) diagnostic, evaluation and treatment services; 4) specialized health care; 5) comprehensive interdisciplinary assessment, health care planning, and health interventions, including early intervention services; 6) specialty consultation, therapy; 7) care coordination/case management; 8) nutrition assessment and counseling and 9) continuing education and training for providers.

The MCH Program along with University of Guam, Guam University Affiliated Program, Department of Education, Special Education Division, Guam Memorial Hospital Authority, the Departments of Public Health and Social Services and Mental Health and Substance Abuse will be working to achieve a statewide network of family-centered, community-based, culturally competent, comprehensive, coordinated health care system for children with special health care needs.

OUTCOME MEASURES

Outcome Measure #01

The infant mortality rate per 1,000 live births

Data collected from the Office of Planning and Evaluation indicated that the infant mortality rate for calendar year 1999 was 8.67 per 1,000 live births, 10% higher than the rate for 1998. The MCH Program conducts an Early Prenatal Counseling Class (EPCC) that provides information on the adverse effects of alcohol, recreational drugs and tobacco usage during pregnancy. In addition, prenatal clients are assessed for unhealthy behaviors and health risks during the initial interview and examination.

Due to the lack of nursing personnel, a program was implemented in late 1999 to accommodate the large number of prenatal clients seeking services. This program, a Prenatal Interview Group Session, combined the Prenatal Interview, Prenatal Evaluation and the Early Prenatal Care Class.

Outcome Measure #04

The postneonatal mortality rate per 1,000 live births

Data collected from the Office of Planning and Evaluation indicated that the postneonatal mortality rate for calendar year 1999 was 2.97 per 1,000 live births 24% lower than the rate for 1998. The nursing staff of the Department of Public Health and Social Services continues to encourage and teach expectant mothers the aspects of what to expect throughout their pregnancy and health practices that promote good health and viability of the neonate/infant's first year of life.

Outcome Measure #05

The perinatal mortality rate per 1,000 live births

In 1998, the perinatal mortality rate decreased to 12.8 per 1,000 live births after a high in 1997 of 19.4 per 1,000 live births.

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaign. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention and 9) child abuse prevention.

Outcome Measure #06

The child death rate per 100,000 children aged 1-14.

In 1998, there were 46,893 children in the age group 1-14. There were 24 deaths within the age group. The child death rate per 100,000 was 5.12. The Bureau of Community Health Services, as part of the Preventive Health Block Grant has targeted unintentional injuries as a priority objective.

The Health Education Section of the Bureau of Community Health Services participated in numerous community activities such as: Child Passenger Safety Awareness Week; Buckle-Up Month; Healthy Mothers Healthy Babies; Drugged, and Drunk and Driving Awareness Month; the Governor's Holiday Hotline and School Opening Day.

The Department of Public Health will be looking into forming a State Child Death Review (CDR) System to conduct multidisciplinary child death review to ensure that all deaths of children from birth to under age 18 are evaluated to reduce the incidence of future deaths. The CDR will be responsible for conducting the multidisciplinary, comprehensive assessment of all child fatalities within the island of Guam for a specific target age group. The CDR will then utilize the information and findings from the reviews to develop island wide prevention strategies to reduce future child deaths.

State Outcome Measure #06

The fetal death rate per 1,000 live births.

The fetal death rate for 1999 was 11.51 per 1,000 live births. There were 47 fetal death in 1999.

The MCH Program coordinates the Healthy Mothers Healthy Babies Campaigns. This collaboration with regards to awareness and education on all facets of Maternal and Child health has proven to be very effective in being comprehensive, coordinated, family-centered and culturally competent. Local government agencies and programs along with non-profit and for-profit organizations are involved in the HMHB campaign to promote the health of mothers, women of childbearing age, infants and most importantly, families.

Organizers and sponsors of the Healthy Mothers and Healthy Babies Campaign assisted in the development, production and airing of Public Service Announcements (PSAs) via print and electronic media in order to increase public awareness, and distributed information on: 1) the importance of early and continuous prenatal care; 2) the management of pregnancy; 3) childbirth preparation; 4) nutrition during pregnancy; 5) infant feeding including breastfeeding; 6) accident and injury prevention; 7) the importance of immunizations; 8) substance abuse prevention; and 9) child abuse prevention.

The nursing staff of the Department of Public Health and Social Services continues to encourage and teach expectant mothers the aspects of what to expect throughout their pregnancy and health practices that promote good health and viability of the neonate/infant's first year of life.