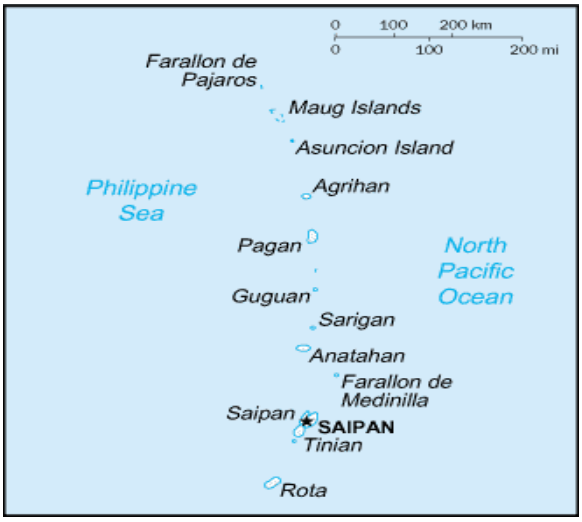
Overview

The Commonwealth of the Northern Mariana Islands (CNMI) is located in the Northwestern Pacific Ocean, approximately 3,700 miles west of Hawaii, 1,300 miles from Japan, and 125 miles north of Guam. CNMI consists of a chain of 14 islands with a total land area of 176.5 square miles spread out over 264,000 square miles of the Pacific Ocean. The population of CNMI lives primarily on three islands, the major island being Saipan (12.5 miles long by 5.5. miles wide), followed by Tinian and Rota. CNMI became a US Commonwealth in 1975 and its residents (excluding foreign contract workers) are US citizens but do not vote in national elections and do not pay federal taxes.

Map of the Commonwealth of the Northern Mariana Islands



In the 2000 census, the total population in CNMI was 69,221, with approximately 90% living in Saipan. Local residents are primarily Chamorro (18,000) with smaller groups of Carolinians (4000), Palauan (1600), and Chuukese (1400). The median age of the population in CNMI is 28.7 years old, which is higher than other islands in the Pacific region in part due to its foreign contract workers who are usually above 18 years old (18-44 years).

General demographic data

Demographic data element	Data
Population	78,252 (July 24, 2004 estimate)
Median age	Total: 29.2 yrs (2004 est.) Male: 31.4 yrs Female 28.2 yrs
Population growth rate	2.71% (2004 est.)
Net migration rate	9.61 migrants/1,000 population (2004 est.)
Life expectancy at birth	Total population: 75.67 years Male 73.11 years Female 78.38 years (2004 est.)
Ethnic groups	Chamorro, Carolinian, other Micronesians,

	Caucasian, Japanese, Filipino, Chinese, Korean
Religions	Christian (Roman Catholic majority, although traditional beliefs/taboos may still be found)
Languages	English, Chamorro, Carolinian [Note: 86% of population speaks a language other than English at home]
Literacy	[definition: age 15 or more and can read/write] male 97% female 96%
Government dependency	Commonwealth in political union with the US; federal funds to the Commonwealth are administered by the US Department of the Interior, Office of Insular Affairs
Government type	Commonwealth; self-governing with locally elected governor, lieutenant governor, and legislature
Legal system	Based on US system, except for customs, wages, immigration laws, and taxation
Economic overview	The economy benefits substantially from financial assistance from the US. The rate of funding has declined as locally generated government revenues have grown. The key tourist industry employs about 50% of the work force and accounts for roughly one-fourth of GDP. Japanese tourists predominate. Annual tourist entries have exceeded one-half million in recent years, but financial difficulties in Japan have caused a temporary slowdown. The agricultural sector is made up of cattle ranches and small farms producing coconuts, breadfruit, tomatoes, and melons. Garment production is by far the most important industry with employment of 17,500 mostly Chinese workers and sizable shipments to the US under duty and quota exemptions.

The economy in the CNMI relies heavily on garment manufacturing and tourism revenue. The flow of visitors – mostly Japanese – has decreased in recent years with the downturn in Asian economy. The garment production employs mostly Chinese workers, about 23,000. In 1999, per capita income was $9,151 compared with $21,587 nationwide. The

CNMI government is the largest employer. The current minimum wage is $3.05 per hour.

The Secretary of Public Health, James U. Hofschneider, MD, heads the Department of Public Health. The CNMI Department of Public Health is responsible for health services in the CNMI. Although there are non-government physicians in private practice in the CNMI, few attend patients in the hospital and most transfer them to the care of a CNMI hospital physician if they need to be hospitalized. The hospital accepts people for acute care regardless of insurance status and ability to pay. Most of these private-practice physicians limit their practice to patients with private health insurance or patients who pay privately for care because of poor reimbursement by the government funded health insurance plan.

There are three divisions under the Department of Public Health: 1) Division of Public Health; 2) Community Guidance Center; and 3) Hospital. Maternal and Child Health (MCH) services are provided through the Division of Public Health. Mr. Pete T. Untalan, Deputy Secretary for Public Health Administration, heads the Division. The mission of the maternal and child health program is "*to improve the quality of life for women and children, including children with special health care needs by providing preventive and primary health care services together with health education and information"*. Other programs in the Division include Family Planning, Immunization, Children with Special Health Care Needs, Diabetes Control and Prevention, Breast and Cervical Screening, Chest Clinic, Oral Health, etc.

Method

The process for the MCH needs assessment involved:

- Advisory committee
- Chart reviews
- Information on services needed by the target population they serve was gathered from discussions with key informants, i.e., Public School System Leadership Team, program managers and key staff;
- Conducting surveys – Kagman Community Health Survey, Patient Satisfaction Survey, Children with Special Health Care Needs Survey
- Focus groups – key topics include prenatal care and adolescent health issues;
- Review current services provided to maternal and child health populatin;
- Compile data on health status indicators and outcome measures;
- Community input during community events

Maternal and Child Demographics

The population of the Commonwealth of the Northern Mariana Islands, especially the maternal and child health population have tripled since the 1980s. The MCH population comprises of more than half of the entire population. The increase in the number of infants, children and women of childbearing age has increased mainly because of recruitment of contract workers. Large portions of the overall population in the age range

of 20 to 34 years are alien women contract workers. (Table 1) Many different racial, ethnic, and cultural groups are represented in the CNMI. The growth of foreign-born population has dominated the demographics of the CNMI in recent decades. Most of the new immigrants are contract workers from the Philippines and China. Filipinos rank as the highest increase in this time period. The number for the indigenous population, Chamorro and Carolinian, has not changed much. (Table 2)

Table 1: Maternal and Child Health Population

Population	1990	2000	Change
Infants (less than 1)	824	1,297	473
Children (1-12 yrs)	8,372	12,701	4,329
Adolescents (13-17)	2,709	3,735	1,026
Women (15-44 yrs)	13,669	25,836	12,167

Source: U.S. Census Bureau

Table 2: CNMI Population by Ethnicity

Ethnicity	1990	2000	Change
Chamorro	12,555	14,749	117.5
Filipino	14,160	18,141	128.1
Carolinian	2,348	2,652	112.9
Chinese	2,881	15,311	531.4
Caucasian	875	1,240	141.7
Other Pacific Islands	3,663	4,600	125.6
Other Asians	4,291	5,158	120.2
Others	2,572	7,370	286.5

Source: U.S., Census Bureau

The general MCH population includes women of childbearing years (15-44 years) infants 0-1 years of age, children 1-14 years of age, including children with special health care needs, and adolescents. 61% of the MCH population comprises the total population for 2000. Many of these women are giving birth to children in the CNMI because of citizenship status; thus the MCH population is greatly affected by the current labor arrangements in the CNMI.

Children in the CNMI come from a diverse background including Chamorro, Carolinian, other Micronesians, Filipino, Chinese, Japanese, Koreans, Thai, other Pacific Islanders, and Americans from the mainland U.S. Between 1990 and 2000, the number of children in the CNMI increased 49%. The ethnicity of these children is much more difficult to define given the amount of mixing, especially among Asians and the indigenous population – Chamorro and Carolinian. The ethnic make-up of live births continues to shift, with a decreasing proportion of indigenous live births and an increasing number and proportion of births among non-resident aliens.

Table 3. Children in the CNMI by Age and Island Residence

Age Group	**CNMI**		**Saipan**		**Rota**		**Tinian**	
	1995	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**
Under 5 years	6,084	5792	5,312	5103	393	368	379	321
5 to 9 years old	4,619	5420	4,004	4703	312	367	303	350

10 to 14 years	3,600	4377	3,128	3801	262	287	210	288
Total	**14,303**	**15,589**	**12,444**	**13,607**	**967**	**1,022**	**892**	**959**

CNMI Census, Central Statistics Office

In the 2000 census there are 252 children aged 5-15 years of age with some disability (there was no definition for disability).

Per population estimate in 2004, about 39% of the population is women of childbearing age (15-44 years) (Table 4). Females outnumber males, comprising of 54% of the population. The largest ethnic group for women in this age group is from the Republic of the Philippines, China, and other Asian countries. This number reflects women in the garment and service industries. In 2000 there were 1,106 female-headed families with children, up from 465 in 1990.

Table 4. Estimated Female Population and Live Births, by age group

	2004			2003		
Age	Births	Female pop	*Births per 1000 women*	Births	Female pop	*Births per 1000 women*
15-19 yrs	111	2,464	*45.1*	118	2,399	*49.2*
20-24 yrs	283	6,185	*45.8*	283	6,014	*47.1*
25-29 yrs	366	8,616	*42.5*	347	8,215	*42.2*
30-34 yrs	340	6,598	*51.5*	358	6,309	*56.7*
35-39 yrs	201	3,921	*51.3*	192	3,762	*51.0*
40-44 yrs	37	2,919	*12.7*	50	2,787	*17.9*
15-44 yrs	1,338	30,703		1,348	29,486	
General Fertility Rate			*43.6*			*45.7*
Total Fertility Rate			*1,243.8*			*1,321.0*

Source: Health and Vital Statistics Office, DPH

Table 5. Women in the CNMI by Age and Island Residence

Age Group	**CNMI**		**Saipan**		**Rota**		**Tinian**	
	1995	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**
15-19 yrs	1,995	2,204	1,719	2,012	149	98	127	94
20-29 yrs	10,461	12,514	9,491	11,969	443	221	527	324
30-39 yrs	10,200	8,725	9,270	8,068	493	275	437	382
40-49 yrs	5,031	3,974	4,547	3,539	268	231	216	204
50+	3,251	2,304	2,892	2,044	220	148	139	112

CNMI Census, Central Statistics Office

Poverty Status

The number of children living in families with incomes below the poverty line went from 4,539 to 6, 501 between 1989 and 1999. The 1999 child poverty rate in the CNMI is higher than Guam – 29%. The number of families living in poverty rose from 1,707 in 1989 to 2,876 in 1999, a 68% increase.

Income

Saipan has the lowest median household income in 1999 at $22,555 compared to Tinian at $23,542 and Rota at $28,708. Median household income in the CNMI is increasing but is substantially lower than the median household income in the United States. The results of the Kagman health survey that was conducted in April of 2004 indicates that 24% of the residents have income of less than $10,000, 9.4% at $10,000-$14,999, and 11% at $15,000-$19,999. 458 residents participated in the survey. The total population for the Kagman community is 15,566. 60% of the participants are Chamorro and 18% are Carolinian.

Health Insurance Coverage Status

- Government funded health insurance plan (HPMR) is provided to government (the CNMI's largest employer) employees and retirees. Unfortunately, due to financial constraints, the government health insurance plan rations resources, prioritizing off-island referrals (to Hawaii, Manila, or the continental US), which require payment in advance.
- Employers of contract workers are required to pay either directly or through insurance for the people they employ (these employees are usually low-paid service jobs including garment workers; hotel, restaurant, and domestic; construction; and agricultural workers). Some employers comply with this requirement but many do not. It should be noted that employers are not required to cover non-contract workers.
- Medically Indigent Assistant Program (MIAP) is a government-sponsored program similar to Medicaid for people who have no insurance and limited resources to pay for healthcare. The program reimburses only the government healthcare system and, unfortunately, has few enrollees due to a premium co-pay requirement of 25-75%.
- The Medicaid program, itself, is very limited because the federal government pays a sum certain rather than matching CNMI Medicaid expenditures. Currently, the CNMI Medicaid program spends $12,353,162 (FY'03) per year but gets only $2,255,000 (FY'03) in federal Medicaid funds. As noted above for government insurance, Medicaid prioritizes payment for off-island referrals because such providers will not accept referrals without advance payment.
- The SCHIP program in CNMI is a Medicaid expansion program. However, CNMI does not get any additional funding for the program so enrollment is extremely limited.
- Medicare is also available, but due to the small number of older adults in the CNMI (less than 4.4%), it is not a significant source of health insurance coverage.

Again, the results of the Kagman survey indicate that 11% of the participants have no health insurance, 23% have the government health insurance plan, and 37.3% have Medicaid for their insurance. The results of the children with special health care needs survey also indicates Medicaid as the health insurance for majority of the respondents.

All of these residents will most certainly go to the public health clinics for services especially since the government run health care facility at the present time is the only facility that sees patients that have the government health insurance plan and Medicaid.

Infant Population (less than 1 year of age) –

Live births have remained steady during 2000-2003. (Table 6) The large influx of temporary adult migrant workers accounts for most of the population growth over the past 15 years.

Table 6. CNMI Vital Statistics, 2000-2003 (per 1,000 population)

Year	Population	Live Births	Deaths	Infant Death	Crude Birth Rate *(Per 1000)*	Crude Death Rate *(Per 1000)*	Infant Mortality *(Per 1000)*
2004	**78,252**	**1,347**	165	**12**	**17.2**	2.1	**8.9**
2003	**76,129**	**1,354**	144	**7**	**17.8**	1.9	**5.2**
2002	**73,052**	**1,294**	164	**10**	**17.7**	2.2	**7.7**
2001	71,136	1,452	150	11	20.4	2.1	7.6
2000	69,221	1,436	165	12	20.7	2.4	8.4
1999	66,508	1,480	185	9	22.3	2.8	6.1
1998	64,592	1,421	180	15	22.0	2.8	10.6
1997	62,677	1,536	147	7	24.5	2.3	4.6
1996	60,761	1,465	164	12	24.1	2.7	8.2
1995	58,846	1,525	171	11	25.9	2.9	7.2

Prepared by: Health and Vital Statistics, Dept. of Public Health
Note: Data as of 2-23-05. Rate is per 1,000.

Mortality

Fetal Death

Fetal death is defined as those deaths at 20 or more week of gestation. The CNMI's fetal mortality rate is lower than the U.S. for 2002 at 6.4 (Health, United States 2004). (Table 7) In reviewing some maternal characteristics for fetal death, more efforts needs to go into increasing our numbers of women coming for prenatal care at first trimester and continuous in addition to reducing unintended pregnancies and promoting the prenatal care classes.

Table 7. Fetal Death in the CNMI: 2000-2004

2000	2001	2002	2003	2004
13.9	9.0	7.7	3.7	11.9

Source: DPH, Health and Vital Statistics Office

Table 8

Table8.1 Fetal Death by Mothers Residential Status, CNMI: 2001-2004

Status	2004	2003	2002	2001
Total	16	9	12	13
CNMI Residents	7	1	4	5
Non-Resident Workers	6	6	7	6
FAS	2	2	1	2
Other	1	0	0	0

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.2 Fetal Death by Insurance Coverage, CNMI: 2001-2004

Coverage	2004	2003	2002	2001
Total	16	9	12	13
Medicaid	3	0	0	3
Private Insurance	3	5	2	5
No Insurance	10	4	10	5

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.3 Fetal Death by Mothers Habitual Usage, CNMI: 2001-2004

	2004	2003	2002	2001
Alcohol/Tobacco/Betelnut Usage	0	1	0	4

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.4 Fetal Death by Mothers Education Attainment, CNMI: 2001-2004

Mothers Education Attainment	2004	2003	2002	2001
Total	16	9	12	13
Sixth	0	1	0	0
Eight	3	0	0	0
Ninth	1	0	0	0
Tenth	2	1	2	1
Twelfth	9	5	7	9
College	0	0	1	3
Not reported	1	2	2	0

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.5 Fetal Death by Sex of Fetus, CNMI: 2001-2004

Sex of Fetus	2004	2003	2002	2001
Male	10	8	7	9
Female	6	1	5	4

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.6 Fetal Death by Mothers Ethnicity, CNMI: 2001-2004

Mothers Ethnicity	2004	2003	2002	2001
Total	16	9	12	13
Carolinian	4	0	1	1
Chamorro	4	1	3	4
Chinese	2	0	1	1
Filipino	4	6	4	5
Thai	0	0	1	0
Indian	0	0	1	0
Palauan	1	1	1	0
Pohnpeian	1	1	0	2

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.7 Fetal Death by Mothers Age Group, CNMI: 2001-2004

M-Age Group	2004	2003	2002	2001
Total	16	9	12	13
15-19 yrs	1	0	0	0
20-24 yrs	1	3	3	1
25-29 yrs	5	3	3	2
30-34 yrs	2	0	4	5
35-39 yrs	5	2	2	4
40 yrs +	2	1	0	1

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.8 Fetal Death by Gestational Weeks, CNMI: 2001-2004

Gestational Weeks	2004	2003	2002	2001
Total	16	9	12	13
13-24 wks	2	4	5	1
25 wks +	13	5	7	12
n/a	1	0	0	0

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.9 Fetal Death by Number of Prenatal Visits, CNMI: 2001-2004

Prenatal Visits	2004	2003	2002	2001
Total	16	9	12	13
No PNC	1	3	2	3
1 to 6	6	4	7	3
7 to 10	3	1	2	4
11 to 15	3	1	0	2
16 +	0	0	0	0
Not reported	3	0	1	1

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.10 Fetal Death by Trimester, CNMI: 2001-2004

Trimester	2004	2003	2002	2001

Total	16	9	12	13
1st (1-14 wks)	3	2	4	3
2nd (15-28 wks)	6	4	3	5
3rd (29-42 wks)	0	0	1	2
No PNC	1	3	3	3
Not reported	6	0	1	0

Source: Health and Vital Statistics Office, Division of Public Health

Table 8.11 Fetal Death by Previous Fetal Demise, CNMI: 2001-2004

Fetal Demise	2004	2003	2002	2001
Total	16	9	12	13
Previous	10	1	7	1
No Previous	6	8	5	12

Source: Health and Vital Statistics Office, Division of Public Health

Infant Mortality

The infant mortality rate in the CNMI in 2004 was 8.9 per 1,000 live births, increasing significantly from the 2003 rate of 5.2 and the 2002 rate of 7.7. The most recent national infant mortality rate available was 7.0 per 1,000 live births [2002] and Guam at 8.6 in 1997. When this data is coupled with the 2004 premature births percentage of 8.86% and 2003 premature births percentage of 10.04%, a scenario begins to form in which unplanned pregnancy, late access and inadequate prenatal care, and poverty play a significant role in poor birth outcomes, additional stressors on the family, community, the health care system and the government.

Table 9. CNMI Infant Mortality Rate: 2000-2004

2000	2001	2002	2003	2004
7.0	7.6	7.7	5.2	8.9

Source: DPH, Health and Vital Statistics Office (Births & Deaths/1000 population; Infant Deaths/1000 live births)

Neonatal and Postneonatal Death

Two other infant mortality indicators are neonatal death rates and post neonatal death rates. Neonatal death is death to infants younger than 28 days of age and post neonatal death is death to infants between 28 and 364 days of age.

Table 10. CNMI Neonatal and Postneonatal Mortality Rate: 2000-2004

	2000	2001	2002	2003	2004
Neonatal	4.9	6.2	5.4	3.7	4.4
Postneonatal	2.1	1.4	2.3	1.5	4.4

Source: DPH, Health and Vital Statistics Office

Birth Weight

Low Birth Weight

Low birth weight is defined as live births weighing less than 2,500 grams or 5 pounds, 8 ounces. Table 11 illustrates low birth weight rate for the past five years. The low birth weight rate for the U.S. for 2002 is 7.8. It is higher than the CNMI for 2002 and 2003. It has been documented that low birth weight infants are born to mothers who did not receive adequate prenatal care, born to teen mothers or mothers older than 35 years of age. In the CNMI the use of tobacco and alcohol were not reported as contributing factors to low birth weight. There were two sets of twins born from 1999-2003 that were low birth weight.

Table 11. Percent of live births weighing less than 2,500 grams in the CNMI, 2000-2004

2000	2001	2002	2003	2004
7.7	6.8	5.5	6.8	

Source: DPH, Health and Vital Statistics Office

Very Low Birth Weight

Very low birth weight is defined as live births weighing less than 1,500 grams or 3 pounds, 4 ounces. In reviewing records, these infants were born at less than 37 weeks gestation; there were no twins born during 1999-2003. (Table 12)

Table 12. Percent of live births weighing less than 1,500 grams in the CNMI, 2000-2004

2000	2001	2002	2003	2004
1.0	0.3	0.5	0.7	0.7

Source: DPH, Health and Vital Statistics Office

Services targeting infants are:

Breastfeeding

The CNMI's Commonwealth Health Center is a baby friendly hospital in which all newborns are breastfed at hospital discharge unless formula is prescribed due to mother or baby being ill. Breastfeeding is promoted during prenatal class, prenatal care visits, and during baby's six weeks checkup. Last year, a midwife and a registered nurse from the Southern Community Wellness Center were sent to attend the breastfeeding training in Guam.

Table 13. CNMI Breastfeeding Rate at Hospital Discharge, 2000-2004

2000	2001	2002	2003	2004
95.0	75.9	80.6	72.3	67.3

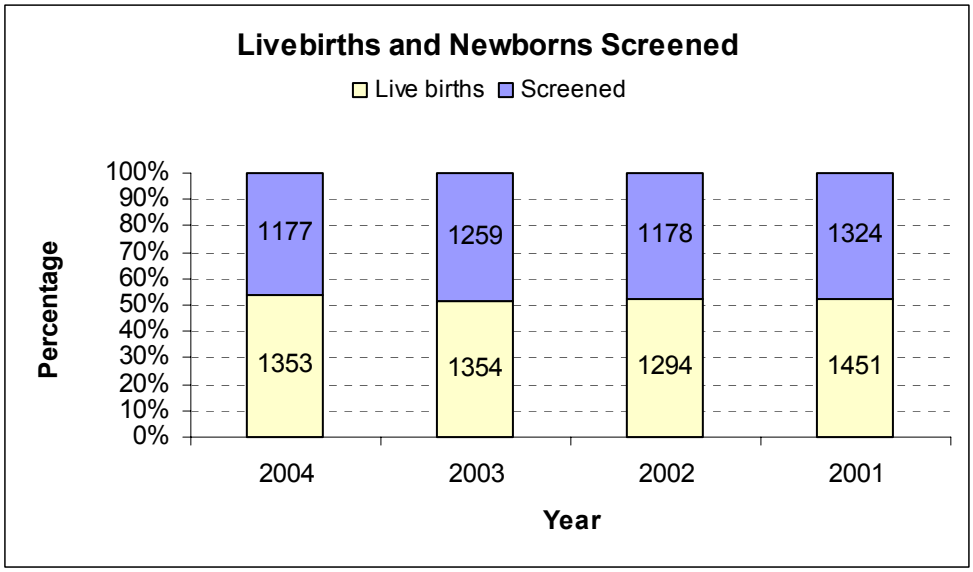
Source: DPH, Health and Vital Statistics Office

Breastfeeding counseling is provided at Northern and Southern Community Wellness Centers as well as the Children's Clinic.

Future Activities: The staff that received the training will conduct an in-service to the other nursing staff. In addition, we are also reviewing the breastfeeding packet to update information.

Newborn Metabolic Screening

Newborns are screened for phyenylketonuria (PKU), congenital hypothyroidism, galactosemia, sickle cell, biotinidase deficiency, congenital adrenal hyperplasia, and maple syrup urine disease. We have a high percentage of newborns that are screened (91.4% for CY 2003) but more work still is required especially in educating parents about newborn screening. Newborn metabolic screening was initiated in 1999.

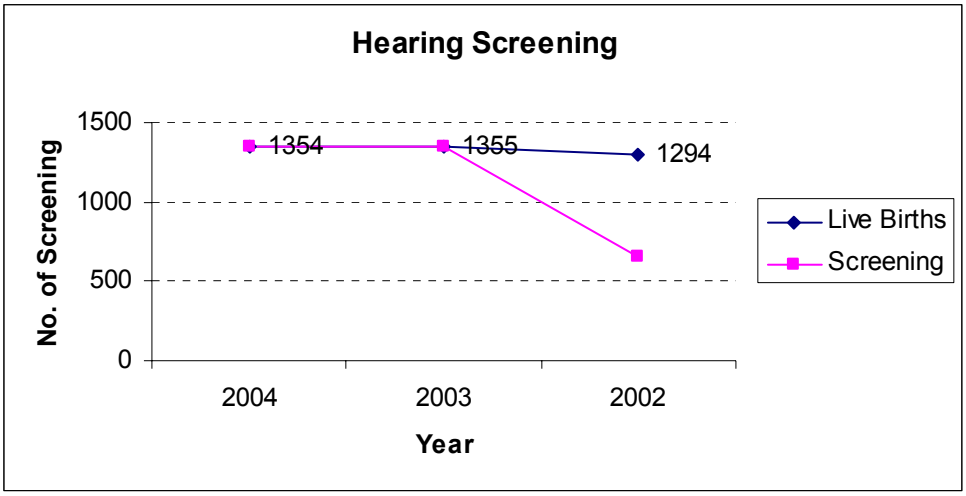


One of the pediatricians has volunteered to be receiving and reviewing all tests that come back negative to ensure follow-up. In doing a chart review for the month of April by the pediatric nurse practitioner, there were 4 infants that needed to be retested. There were two that did not have the results (paper from the lab) in the chart but the re-screenings were done. The nurses at the Children's Clinic and the Northern and Southern Wellness Centers are working hard to make sure that all babies identified as needing to be re-screened do so. The recruitment of the pediatric nurse practitioner has enhanced our efforts in making sure that babies needing follow up care receive it.

Future Activities: We are currently reviewing brochures to purchase to include in the information package for parents. We have submitted to the MCHB Early Comprehensive Childhood System grant application. One component of the grant is to recruit a staff that will be at the Maternity Ward to provide information to parents and to follow up on the discharge planning. Finally, there is a team consisting of the pediatric nurse practitioner, mch coordinator, lab manager, chair of the pediatric unit working on a policy to have the metabolic screening done before hospital discharge to make sure that all babies born at the Commonwealth Health Center are screened.

Newborn Hearing Screening

Newborn hearing screening was initiated in July of 2002 through the universal hearing screening grant from HRSA/MCHB. A policy was implemented to make newborn hearing screening a standard care practice for babies born at the Commonwealth Health Center. The grant was written in collaboration with the Public School System. The advisory committee consisting of nursery nurses, audiologist, MCH Coordinator, two parents, and a pediatrician meets every quarter to review the program. We have brought in trainers to train the nursery nurses on using the OAE equipment and also the importance of follow-up testing. The nurses are responsible for recording the results in the patient chart, informing the physicians, and doing the referral process for infants who did not pass the initial hearing screening. This has been a very successful collaboration. The program on average screens 99% of all newborns prior to hospital discharge. It has identified 5 infants with hearing loss this past year. Following identification and further diagnostic testing, infants are referred to the Early Intervention Services Program at the Children's Developmental Assistance Center (C*DAC) where intervention services and amplification needs are coordinated for the infant and their families. This has been one of our successful service and collaboration with the public school system.



Future Activities: The Department submitted the early hearing and detection surveillance grant application in April to CDC. **We just received word that our grant application has been recommended for approval.** We will continue to conduct training to staff and work with parents for those needing referral for early intervention services. We have identified the Social Worker working for the early intervention program to be responsible for calling up parents for those infants that need to be retested. We are in the process of procuring two otoacoustic emission (OAE) units that will be placed in the outreach clinics so that infants seen there can be immediately retested. We are also updating our brochures to include the importance of retesting.

Well Baby Clinic and Immunization

Services include health education and counseling, breastfeeding counseling, assessment and monitoring of growth and development and other underlying health problems, and physical examinations. This is provided at the two wellness centers as well as the children's clinic.

The biggest challenge for the CNMI Immunization Program is tracking children who have exited the island and the constant moving of residence of children who are Micronesians or have contract workers as parents. Although we continue to struggle with shortages of nurses, we work hard to ensure accessibility of service by collaborating with the six private health clinics on the island of Saipan. Strategies to increase our immunization numbers include: 1) Mass media campaigns on the importance of age appropriate immunization; 2) conducting presentations at parent teacher association meetings and working with schools for complete immunization of each student; 3) opening of clinics at night and on Saturdays; 4) providing immunization on-site during community events; 5) house-to-house campaign; 6) review list of names daily and 7) allow for walk-ins. Obviously, the best approach is to actively immunize versus passively waiting for parents to bring in their children to the public or private clinics. Supplemental immunization activities during immunization awareness week include going to a site (i.e., school) at the villages to give shots at the same time providing transportation to the site and opening of the clinics after hours 5 days a week, including Saturdays. The program does have the list of names of those children who are behind in their immunization. The program staff continues to work closely with the schools to ensure that all children who are enrolled are immunized. We have also been working closely with the different ethnic groups to assist us in our immunization work. The two barriers for parents not bringing their children in for immunization are lack of transportation and the clinic operation hours including only not accommodating for walk-ins which we changed.

Table 14. CNMI 2004 Immunization Assessment

2004 ASSESSMENT (MAY)

Birth Year	Regist	Inact	Active	Due	UTD	%	DTaP	%	IPV	%	HEP-B	%	MMR	%	HIB	%
2003	1393	44	1349	127	1222	*91%*	1223	*91%*	1223	*91%*	1221	*91%*			1222	*91%*
2002	1377	215	1162	170	992	*85%*	1067	*92%*	1066	*92%*	1090	*94%*	1042	*90%*	1094	*94%*
2001	1589	335	1254	225	1029	*82%*	1041	*83%*	1203	*96%*	1208	*96%*	1185	*94%*	1099	*88%*
2000	1662	342	1320	280	1040	*79%*	1054	*80%*	1249	*95%*	1267	*96%*	1241	*94%*	1101	*83%*
1999	1749	441	1308	342	966	*74%*	938	*72%*	951	*72%*	1283	*98%*	971	*74%*		
1998	1774	496	1278	179	1099	*86%*	1113	*87%*	1119	*88%*	1242	*97%*	1121	*88%*		
TOTAL	9544	1873	7671	1323	6348	*83%*	6231	*81%*	6811	*89%*	7311	*95%*	5560	*85%*	4516	*85%*

2004 ASSESSMENT (AUGUST)

Birth Year	Regist	Inact	Active	Due	UTD	%	DTaP	%	IPV	%	HEP-B	%	MMR	%	HIB	%
2003	1393	44	1349	127	1222	*91%*	1223	*91%*	1223	*91%*	1221	*91%*			1222	*91%*

2002	1377	247	1130	115	1015	*90%*	1070	*95%*	1076	*95%*	1090	*96%*	1039	*92%*	1093	*97%*
2001	1589	350	1239	198	1041	*84%*	1064	*86%*	1198	*97%*	1200	*97%*	1186	*96%*	1107	*89%*
2000	1662	339	1323	226	1097	*83%*	1107	*84%*	1265	*96%*	1279	*97%*	1256	*95%*	1149	*87%*
1999	1749	460	1289	251	1038	*81%*	1039	*81%*	1051	*82%*	1261	*98%*	1064	*83%*		
1998	1774	497	1277	148	1129	*88%*	1138	*89%*	1143	*90%*	1249	*98%*	1147	*90%*		
TOTAL	9544	1937	7607	1065	6542	*86%*	6641	*87%*	6956	*91%*	7300	*96%*	5692	*90%*	4571	*91%*

Source: DPH Immunization Program

Future Activities: The immunization assessment coverage survey will be conducted in July of this year in support from CDC. The CNMI was chosen as the project test site area and representatives from the immunization program from the other Pacific Jurisdictions, including American Samoa, Puerto Rico, and the Virgin Islands, will be coming to Saipan for the survey training. This is a house-to-house assessment survey for 19-35 months old children. This will show the true coverage rate for this target group. This will be first time that this will be done since the inception of the program.

Child Population (1 - 14 years of age)

Child Mortality

Unintentional Injuries

The death rate due to unintentional injuries remains steady for children in the CNMI (Table 15). Motor vehicle crashes are the major causes of this type of death. Please note that the CNMI do have child safety seat law and seat belt law. Every year DPH collaborates with the Department of Public Safety to promote this safety measures for infants and children.

Table 15. Rate of Death of children 14 yrs and younger due to motor vehicle crashes, 2000-2004

2000	2001	2002	2003	2004
12.8	0	6.4	5.8	0

Source: DPH, Health and Vital Statistics Office

Table 16. CNMI Child Death Rate (1-14 years), 2000-2004

2000	2001	2002	2003	2004
7.0	6.8	19.7	31.8	24.7

Source: DPH, Health and Vital Statistics Office

Causes of death to Children –

Table 17. Top 3 Causes of Death for Children (1 through 14) in the CNMI

Cause of Death	Birth to 1	Cause of Death	1-14 years old
Pneumonia	3	Brain Injury	2
Premature	2	Accidents	2
Sepsis	1	Pneumonia	1
Total Deaths	**7**		**5**

Source: DPH, Health and Vital Statistics Office

Purpose of Visit –

Table 18 illustrates the ten purposes of visits at the government run health facilities only.

Table 18. Top Ten Visits for Infants less than 1, CY 2003

Purpose of Visits (POV)	Number of visits
Routine Child Health Exam	763
Acute URI NOS	104
Acute Bronchiolitis, Infect	50
Fetal/Neonatal Jaundice NOS	30
Otitis Media NOS	18
Persn w Feared Complaint	16
Constipation	15
Follow-up Exam	11
Other Atopic Dermatitis	10
Thrush	8

Source: MUMPS System

Table 19. Top Ten Visits for Children Aged 1-21 years, CY 2003

Purpose of Visits (POV)	*Number of Visits*
Dental Exam	5,517
Routine Child Health Exam	2,822
Acute URI, Nos	2,744
Otitis Media	1,736
Vaccine for Poliomyelitis	1,179
Asthma Unspecified	1,165
Noninf Gastroenterit NEC	1,036
Inoculat Against Vieral HE	806
Supervis Normal 1st Preg	698
Fever	587

Source: MUMPS System

Services targeting children are:

Well Child Clinic – Provides immunization, health education and counseling on areas such as nutrition and child safety, assessment and monitoring of growth and development and other underlying health problems, and physical examinations.

Oral Health - The reorganization of the Dental Health Unit currently focuses on providing services to children, indigent, and the elderly. We continue to work with Head Start and the public and private schools to bring students to the clinic to receive sealant and fluoride varnish application. An assessment is also conducted on each child's teeth and a report card showing the necessary treatment plan is provided to parents. Students in first, fifth, and sixth grades participate in this activity. The percentage assessed with caries is always above 50% for all the schools. For the Head Start children we also conduct oral health education and information to parents. This past school year, 2003-2004, our staff was scheduling appointments for the children per treatment plan need and

there was still a high number who do not come for the appointment. In 1999, one hundred and twenty one (121) infants and children between the ages of 6-36 months were assessed for fluoride supplement of both mother and child, teeth brushing practices, severity of baby bottle mouth, ECC, and prevalence of dental caries. 49% were diagnosed with mild, moderate or severe tooth decay. Practitioner perception is that the rate of baby bottle syndrome is exceptionally high. Many children continue to use the bottle well into their 5th year of life. Community education regarding the importance of oral health is conducted sporadically in the past because of lack of staff. With the recruitment of two dental hygienists, we have started participating during community events.

Table 20. Sealant Program for School Year 2004-2005 in the CNMI

NAME OF SCHOOL	TOTAL ENROLLMENT	TOTAL ASSESSED	PERCENTAGE PARTICIPATED	TOTAL NO. TEETH SEALED	WITH CARIES	PERCENTAGE ASSESSED W/CARRIES
CHACHA	174	137	79%	629	95	69%
KAGMAN	266	218	82%	975	173	79%
SAN VICENTE	332	298	90%	957	231	78%
DANDAN	207	147	71%	612	114	76%
KOBLERVILLE	188	137	73%	605	112	82%
SAN ANTONIO	180	137	76%	581	97	71%
MOUNT CARMEL	134	108	81%	542	72	67%
GRACE CHRISTIAN	96	65	68%	249	33	51%
WILLIAM S. REYES	268	226	84%	894	165	73%
OLEAI	214	193	90%	746	153	79%
GARAPAN	406	358	88%	1,496	250	70%
TANAPAG	116	98	84%	414	82	84%
G.T. CAMACHO	109	77	71%	273	54	70%
TOTAL	2,690	2,199	82%	8,973	1,631	74%

Source: DPH, Dental Health Unit

Future Activities: More education/information and counseling efforts needs to go into education on baby bottle syndrome during prenatal care visits, immunization visits with documentation. In line with this, more work also needs to go into educating parents on fluoride. Pediatricians, both public and private clinics, need to be more involved and aggressive in regards to referrals of children with caries to the Dental Unit. We will apply for the MCHB oral health grant for the next grant cycle. We also have plans to apply for the ACF Head Start Oral Health Initiative for Young Children, Birth to Five grant. Finally, there will be training for the dental assistants to enhance their capacity in conducting oral health outreach activities. We will have more data to present after analysis of the dental component of the Healthy Living in the Pacific Islands survey is done. It was noted that 75% of referrals were for dental care after the survey was conducted.

Childhood Obesity

The CNMI ranked third in the world for prevalence of Type II diabetes. Obesity has been growing at a fast pace in the CNMI. The rates are higher than those of the US mainland, and this is evident when looking at any typical classroom. During school year 2003-2004, 48% of students enrolled in Garapan Elementary School and 54.4% of students enrolled in Tanapag Elementary School were either overweight or at risk for overweight. To combat the obesity epidemic, the Public Health Dietitian has been going into individual classrooms to educate children on healthy alternatives to their current diets, and the consequences of obesity. The Diabetes Prevention and Control Program together with EFNEP (Expanded Food and Nutrition Education Program) and the Northern Marianas College Cooperative Research Education Extension Services (NMC-CREES) have done numerous hands-on activities in the public and private elementary schools (a nutrition jungle tour and healthy lifestyle obstacle course are a few of the activities) to educate children on the importance of physical fitness and good nutrition. Both programs have also worked with Head Start children and parents to incorporate healthier lifestyles. The nutritionist has also worked closely with parents and families of children with special health care needs.

The Diabetes Control and Prevention Program did an assessment of tenth graders during school year 2003-2004 called Project 10. The research study showed that majority of sophomore students who are of Asian or Pacific Islander descent have a family history of diabetes, putting them at a high risk for type II diabetes. For Project 10, height, weight, BMI, blood pressure, blood sugar, and skin pigment discoloration were taken plus questions were asked on physical activity, food consumption, knowledge of diabetes, and family history of diabetes. During this school year, there were 925 sophomores enrolled in all the schools, both public and private. A total of 453 signed parental consent forms were returned. Some key findings include:

- 78% reported that they have family members with diabetes
- 82% responded that eating too much sugar and sweet food causes diabetes
- 50% responded that they eat fast food 3 to 4 days a week
- 47% responded that they drink regular soft drinks 3 to 4 days a week
- 44% responded that they drink high-sugar drink – iced teas, juices, etc.

The intervention measure that the study is recommending to prevent diabetes is to provide nutrition education to help the students learn to eat a healthy, balanced diet to avoid weight gain during their life span. The CNMI lifestyle includes many big parties and fiestas filled with various types of food, mostly high in calories. Thus, education regarding the different components of a healthy diet and how one's behaviors affects one's weight and energy level is very critical according to the study.

A survey to determine the health condition of children in the CNMI is currently being conducted in collaboration with the University of Hawaii and NMC-CREES. The survey would identify whether children in the CNMI are at risk for nutrition-related diseases and deficiencies. A household random sampling of 420 children from ages 6 month to 10

years will be chosen to participate in the survey. Health screenings include blood pressure, cholesterol, and hemoglobin level. Dental exams will also be conducted to identify missing, filled, and decaying teeth as well as inflamed or bleeding gums. Other assessments include skin rashes, early signs of puberty, dietary and physical activity information, weight, height, BMI, and arm circumference. Referrals for any abnormal screening observed will immediately be done. This will certainly provide very critical data and information on childhood obesity and dental caries rate.

DPH has also formed a partnership with Western Michigan University on "Project Familia" in collaboration with the Public School System. Project Familia is a program for parents of elementary school children and will be offered in all 12 pubic elementary schools in the CNMI. The goal is to improve family lifestyle in the CNMI especially for our young children, like reduce inactivity, help families lean portion control, increase more activity, encourage families to be more positive when helping their young children, practice healthy food shopping strategies, help families to know their children, to understand their unique needs and ways to motivate them, balance their energy sources – energy in = energy out, identify challenges and strategies unique to each family to support healthy living, and promote virtues such as moderation, assertiveness, and consideration. Six schools will start this project in August of this year and the other six will start on January 2006. Project Familia is a cognitive-behavioral intervention. It engages the children and parents in learning knowledge and skills. Thus, we are systematically partnering with parents to prevent childhood obesity. To reiterate, our focus is on promoting a healthy island lifestyle, one that is positive, caring and protective for our children.

Future Activities: With the resignation of the public health nutritionist in March of this year, the priority currently for the Division is to recruit not just one but two nutritionists. We also submitted the CNMI's WIC State Plan to implement the WIC program here in the CNMI last year in August. We are currently working on the revisions to resubmit the state plan in mid July. Nutrition counseling and education is a major component of the program along with promotion of breastfeeding We will present findings from survey conducted next year

PRIORITY: The CNMI residents has paid a high cost for problems associated with diabetes which include the quality of life, shorter life span, and the high costs of treatment. Reducing childhood obesity by providing intervention measures at a much younger age will assist the community in living healthier lifestyles.

Children with Special Health Care Needs -

The CNMI provides early intervention services to infants and toddlers, birth through age two, and their families in collaboration with the Public School System (lead agency) since 1986. This is the entry point for children identified with special health care needs. Services are provided to infants and toddlers that meet the following criteria:

1. Developmental Delay in the area of cognitive development; physical development, including health vision, and hearing; communication development; social or emotional development; or adaptive development (self-help or daily living skills).
2. Established Condition– a diagnosed physical or mental condition such as chromosomal anomalies/genetic disorders and neurological disorders.
3. Informed Clinical Opinion – defined as procedures including clinical assessment and observation used by qualified professionals, i.e., physician, audiologist, speech pathologist.
4. Infants and toddlers at risk for developmental delay because of biological or environmental factors. These are the low or very low birth weight and premature infants or infants born to teen mothers.

Out of 1,354 live births in 2004, the percentage of children served in the early intervention program is 1% – national average is 2%. Majority of our children are of Chamorro ethnicity – 38% - followed by Filipinos – 35% (2004). Data shows that in 2004 most referrals are received from the NICU (28%) and the Department of Public Health (11%); 9% is from parents and families. The three most referral diagnosis for early intervention services are developmental delay, prematurity, and speech delay.

We continue to emphasize early identification and early intervention for this target population using interdisciplinary team approach. Currently, most of the referrals are for children at one year of age (72%). Because of the importance of providing early intervention services, we will work on identification and referral of children much younger. We will work with the private providers for referrals.

The CNMI currently is providing early intervention services to about 1.2% of the total population of birth to 3 years old. The percentage of children served is below the national average by 1%. The number of children served in 2004 is 47. The numbers of referrals for 2004 is 116. 41% of our referral source is from the Neonatal Intensive Care Unit at the Commonwealth Health Center, 29% from the public health facilities, and 10% from parent/family.

The CNMI will strive to increase referrals and the percentage of children served. We will compare our number with the national average as a guide to ensure that all infants and toddlers, including children from unserved and underserved populations, are identified and served.

In the Memorandum of Understanding (MOU) that has been updated and signed in March of 2005, the Division of Public Health through the Maternal and Child Health Program is responsible for Comprehensive Public Awareness and Child Find System. The public awareness activities include training for staff and/or families, parent to parent night, printed materials, i.e., brochures, and flyers, media announcements, and participating in community events or symposiums/meetings.

We partner and collaborate with different agencies to ensure that these children receive the services they need. Specialist ranging from cardiology to orthopedic comes to Saipan twice a year. Off-island medical referral is available but is expensive. A round trip airfare to Honolulu can cost up to $2,000.

Key findings from the Children with Special Health Care Needs telephone survey are:

#1: The Child's primary health care provider is the public health clinics or the Commonwealth Health Center (CHC) located on the island of Saipan, Rota Health Center located on the island of Rota, or the Tinian Health Center located on the island of Tinian. These facilities are government run health centers.

#2: Majority of the families surveyed has Medicaid as their primary health insurance with no other form of insurance (62%). They also responded that their health insurance does cover adequately the cost of their child's special health needs including off-island health care costs with the assistance of the Medical Referral Program.

#3: Majority of the families responded that they are involved with care of their children (89.9%) and that they are satisfied with the services their child receives (86%). *Please note that when asked about involvement in the development of the Individualized Family Service Plan (IFSP) or the Individualized Education Plan (IEP), majority also responded that they are very involved.

#4: When asked about medical home, majority responded that they do have a medical home – the public health clinics, wellness centers, or the hospital (68%). In regards to receiving services that is coordinated, ongoing, and comprehensive, majority responded that they feel this is what their child is receiving although not in a consistent manner 93%). For example, sometimes they wait 6 months to a year to for their child to see a specialist.

#5: In the area of their youth receiving skills for transition to adulthood, those surveyed that have children in this age group responded that they were not sure if this skills are included in their child's IEP and those that said that it was included responded that there is not enough time to really provide the necessary transitional skills.

#6: Since there are no private organizations providing services for CSHCN in the CNMI, 'community-based services' was defined as any service provided out in the community for CSHCN. For example, early intervention services for 0-3 aged group are provided by government agencies. For eye examinations, children have to go to private eye clinics; but for those children that do not have any form of insurance the Department of Public Health or the Public School System will pay for the service. Based on the responses of the participants, we feel that they were confused in the definition of community-based services. We also feel that the interviewers were confused in the definition. For example, when asked if they use community-based services 55.6% responded no and when asked about easy accessibility to these services 55% responded yes.

PRIORITY: The success of early intervention is very critical when it is started as soon as a child with special health needs is identified. The staff will work hard to increase the percentage of eligible infants with disabilities under the age of 1 receiving early intervention services.

(Children with Special Health Care Needs Survey report is attached to the Other MCH Capacity narrative)

Adolescent Population –

Mortality

The three leading causes of adolescent mortality during 1999-2003 are deaths due to motor vehicle accidents, suicide, and unintentional injuries. During 2004, there was one accidental drowning death for this age group.

Suicide

In the 2003 Youth Risk Behavior Survey, the percentage of middle school students who have attempted suicide during the past year is 46.1 and the percentage of high school students who have attempted suicide during the past year 7.4%). In the 2001 YRBS, the percentage of high school students who seriously considered attempting suicide during the past 12 months 29.5 (1,327 respondents) and the percentage of students who actually attempted suicide one or more times during the past 12 months is 22.5 (1,124 respondents). The Division of Public Health staff conducts presentations during symposiums, forums, meetings, etc. with other agencies to address this issue. Some prevention strategies outlined in the Youth Suicide Prevention Plan for the CNMI include school-based suicide awareness/prevention programs, skills training, screening, peer helpers, etc.

Table 21. Rate of suicide deaths among youths aged 15-19 in the CNMI, 2000-2004

2000	2001	2002	2003	2004
44.2	122.2	50.7	0	0

Source: DPH, Health and Vital Statistics Office

Teen Pregnancies

The national incidence of teen pregnancy in 2003 was 41.7 births per 1,000 teens aged 15-19, falling from 43.0 in 2002, while the CNMI teen birth rate climbed from 45 births per 1,000 teens aged 15-19 in 2002 to 49 births per 1,000 teens aged 15-19 in 2003. However, we have noted a fall in our birth rates in 2004 across the entire teens aged 15-19 population after the initiation of the pilot program at the school-based clinic.

The Division of Public Health continues to make the prevention of teen pregnancy and decreasing the number of teen births a priority. This is evident with the opening of the Adolescent Health Center in 2004 at one of the public high school on the island of Saipan, Marianas High School. The Division plans to implement teen pregnancy

prevention strategies through community-based/public health led teen pregnancy prevention projects, develop programs that reduce risk-taking behaviors (violence, suicide, unintentional injury, substance abuse) of adolescents in coordination with the Community Guidance Center, and promote the health of adolescents through education. Although the birth rate for older Chamorro women continues to decline the teen birth rate for Chamorros continues to increase**.**

Table 22. Teen Birth Rates, CNMI [Rate per 1,000]

Age	2004	2003	2002	2001	2000
Age 15-19	45.1	49.2	45.0	66.5	63.0
Age 15-17	34.5	49.0	37.0	51	58.0
Age 18-19	54.4	69.0	68.0	100	81.0

The 2003 YRBSS reports the following sexual activity:

Sexual Behavior	US %	CNMI %
Ever had sexual intercourse	46.7	53.9
Had first sexual intercourse before age 13	7.4	4.8
Had four or more sexual partners in lifetime	14.4	15.1
Had sexual intercourse with one or more people during the past 3 months	34.3	36.7
Used condom before last sexual intercourse	63.0	35.6

Source: 2003 US and CNMI YRBSS

Teen Births

Table 23. Teen Deliveries by Mothers Age and Ethnicity, CNMI 2004

Mothers's Ethnicity	Total	15-17 yrs	18-19 yrs
Total	112	41	71
Carolinian	5	1	4
Chamorro	76	30	46
Chuukese	5	1	4
Filipino	12	5	7
Japanese	1		1
Palauan	6	1	5
Pohnpeian	6	3	3
Yapese	1		1

Source: DPH, Health and Vital Statistics Office

Table 24. Teen Deliveries by Mother's Age and Ethnicity, CNMI 2003

Mother's Ethnicity	Total	15 yrs	16 yrs	17 yrs	18 yrs	19 yrs
Total	116	9	14	25	32	36
Carolinian	11		1	1	1	8
Chamorro	79	7	11	19	21	20
Chuukese	3				1	2
Filipino	12		2	1	6	3

Israeli	1			1		
Japanese	1	1				
Kosraean	1				1	
Palauan	3			3		
Pohnpeian	4					3
Thai	1				1	
Yapese	2	1			1	

Source: DPH Health and Vital Statistics Office

One of the program goals for 2004-2005 is to continue to improve access to prenatal care for teenagers. CNMI DPH must also improve its outreach efforts to those under age 18, by providing both abstinence and birth control counseling.

Public health and family planning program energies are needed to collaborate with the Public School System in designing a comprehensive program of abstinence promotion; addressing social pressures that influence sexual behavior; male involvement; culturally-sensitive skills-building in communication, negotiation, conflict-resolution, assertiveness and refusal techniques; and sexuality education [including HIV and STD infection information] to the middle school student population.

Sexually Transmitted Illnesses

Chlamydia ranks as the highest STI amongst adolescents in the CNMI.

Table 25. Chlamydia rate aged 13-19 years, 2000-2004

2000	2001	2002	2003	2004
1445.6	947.7	750.6	746.6	839.9

Source: DPH, Health and Vital Statistics Office

The *Youth Risk Behavior Surveillance (YRBS*), was designed to focus the nation on behaviors among youth related to the leading causes of mortality and morbidity among both youth and to assess how these risk behaviors change over time, measure behaviors that fall into six categories:

- Behaviors that result in unintentional injuries and violence;
- Tobacco use;
- Alcohol and other drug use;
- Sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies
- Dietary behaviors; and
- Physical activity.

The 2003 Youth Risk Behavior Surveillance Survey (YRBSS) was completed by 2,177 students in five high schools in the Northern Mariana Islands during the spring of 2003. The school response rate was 100 percent, the student response rate was 86 percent, and the overall response rate was 86%. The results are representative of all students in grades 9-12. Students completed the self-administered, anonymous, 99-item questionnaire.

Survey procedures were designed to protect the privacy of students by allowing for anonymous and voluntary participation. Local parental permission procedures were followed before survey administration. The weighted demographic characteristics of the sample are as follows:

Table 26

Sex	Percentage
Female	51.5
Male	48.5

Table 27

Grade Level	%age of Total Respondents
9th grade	31.4
10th grade	29.7
11th grade	22.7
12th grade	16.1

Table 28

Ethnicity	Percentage of Total Respondents
Chamorro	64.3
Carolinian	11.4
Filipino/Asian	12.8
Micronesian	2.6
Other Pacific Islander	2.5
All other races	0.5
Multiple race, Non-Hispanic	5.9

Source: 2003 CNMI YRBSS

Estimating Youth Risk Behaviors Related to HIV Infection

Table 29

Alcohol & Other drugs	US %	CNMI %
Ever used injected illegal drugs	3.2	2.7
Used alcohol or other drugs at last sexual intercourse	25.4	34.3

The above self-disclosed information creates a realistic picture of risk-taking behavior related to sexual activity and substance use in the adolescent high school population.

- CNMI high school adolescents exceeded US rates by almost ten percent in the use of mind-altering substances combined with sexual intercourse, a behavior most closely associated with unsafe, unprotected sexual activity.

- CNMI adolescents who are sexually active are less likely to use condoms during sexual intercourse.
- CNMI adolescents were more likely to be sexually active than their US counterparts.

Table 30

Protective Factors YRBSS 2003	**High School**	**Middle School**
Students who agree or strongly agree that their family loves them and gives them help and support when they need it	81%	84.9%
Students who agree or strongly agree that their parents have clear rules and standards for their behavior	80.9%	83.4%
Students who agree or strongly agree that their teachers really care about them and give them a lot of encouragement	59.8%	72.0%
Students who agree or strongly agree that they are good at making decisions and following through on them	71.7%	65.9%
Students who agree or strongly agree that they feel like they matter to people in their community	55.0%	56.6%

Source: 2003 YRBSS

Optimistic news in the CNMI 2003 YRBSS included strong "protective factor" statements regarding love, support, and behavior standards in families, providing the foundation for our proposed "Parent Power" outreach program.

Other Youth Risk Behaviors summary findings:

'01	'03	Tobacco, Alcohol and Drug Use - Middle School
57.3%	49.4%	Drank alcohol during the past month
45%	34.2%	Used marijuana during the past month
9.1%	5.6%	Tried marijuana before age 11
13.4%	4.6%	Used form of cocaine including powder, crack, & freebase
21.2%	13.1%	Sniffed glue, breathed contents of spray cans or inhaled paints/sprays to get high
79.4%	68.8%	Have smoked cigarettes
41.4%	32.8%	Smoked cigarettes during the past month
52.9%	47.2%	Used any tobacco during the past 30 days
40.8%	39.5%	Chewed betel nut with tobacco on one or more of the past 30 days
40.8%	56.5%	Chewed betel nut or pugua the first time before age 11

'01	'03	Tobacco, Alcohol and Drug Use - High School
47.4%	14.7%	Drank alcohol during the past month
40.4%	41.2%	Used marijuana one or more times during the past month
16.9%	15.8%	Used marijuana on school property during the past month

2.3%	3.6%	Used form of cocaine including powder, crack, & freebase
9.4%	11.3%	Sniffed glue, breathed the contents of spray cans or inhaled paints/sprays to get high
35%	38.3%	Offered, sold, given illegal drugs on school property by someone during the past month
46.9%	14.6%	Smoked cigarettes during the past month
38/7%	41.1%	Smoked a whole cigarette for the first time before age 13

'01	'03	Diet, Nutrition, and Exercise - Middle School
18.7%	20.9%	At risk for becoming overweight
21%	20.4%	Are overweight
54.8%	65.4%	Did not participate in vigorous physical activity

'01	'03	Diet, Nutrition, and Exercise - High School
78.1%		Did not eat 5 or more fruits and vegetables per day
14.8%	17.4%	Are overweight
43.9%	14.0%	Did not participate in vigorous physical activity
66.9%	14.8%	Did not attend P.E. class daily

'01	'03	Unintentional and Intentional Injuries - Middle School
24.4%	12.2%	Rarely or never used safety belts
64.8%	57.0%	Rode with a drinking driver during the past month
33.1%	46.1%	Attempted suicide during the past year
64.7%	57.2%	Have ever been in a physical fight
54.7%	42%	Carried a weapon during the past month – gun, knife, club

'01	'03	Unintentional and Intentional Injuries - High School
10.3%	14.1%	Rarely or never used safety belts
51.9%	53.8%	Rode with a drinking driver during the past month
22.5%	7.4%	Actually attempted suicide during the past year
41%	40.2%	Felt sad or hopeless almost everyday for 2 weeks or more in a row that they stopped doing some usual hobbies

The selected results of the 2003 CNMI middle school YRBS cited above indicate a real and immediate need to provide public health intervention services to our young adolescents in the middle school setting. Public health program energies are needed to collaborate with the Public School System in designing a comprehensive program of abstinence promotion; addressing social pressures that influence sexual behavior; male involvement; culturally-sensitive skills-building in communication, negotiation, conflict-resolution, assertiveness and refusal techniques; and sexuality education [including HIV and STI information] to the middle school student population.

The Adolescent Health Center at Marianas High School

The Adolescent Health Center, a school-based health center, opened on April 19, 2004, on the campus of Marianas High School. The CNMI Department of Public Health has collaborated with the CNMI Public School System (PSS) to implement this pilot study through a pilot study grant that the PSS received from the office of the CNMI Governor Juan Baubata. The Healthy Student Pilot Program from the Governor's Education Initiative provided grant funding, effective 2/1/2004 and has ended on 2/1/2005. The grant funds were deposited with the Public School System's account and the Division of Public Health is reimbursed through this account. The clinic was closed during the summer months of June and July for summer break, reopening in August, 2004.

This pilot program has been very successful in opening dialogue with teens about abstinence, sexuality, and STD/HIV. Its success has shown us that the way to reach teens is in their school environment. Within a seven month timeframe, we have encountered:

- 383 family planning counseling sessions
- 110 female teens chose not to pursue contraception, reporting that they were not going to be sexually active
- Male condoms were readily available at no charge
- 59 female teens initiated DMPA injectible contraception
- 69 female teens initiated oral contraception
- Positive Chlamydia testing: 7
- Positive Gonorrhea testing: 1
- HIV testing on site: 52
- Total EC users: 30
- Pregnancy tests: 104
- Positive pregnancy tests: 6
- Prenatal care on site: 10 teen women

The Division of Public Health is working with students at Marianas High School to self-produce health videos on emergency contraception and teen pregnancy. An experienced registered nurse provides education on abstinence, ABCs, reproductive health, STDs and HIV, as well as contraception within the classroom.

Family planning counseling is provided confidentially within the clinic in addition to clinical services including in-depth social, medical and sexual histories, physical exams with pap tests and STD testing as indicated. Young men can be tested for STDs on site as well. HIV pre-test and post-test counseling and HIV testing occur on site.

Our goal is not to encourage sexual activity in adolescents. Rather, our dream is to provide comprehensive interventions at age-appropriate levels in a culturally-sensitive manner that will impact the frightening possibilities of adolescent sexual activity, including, but not limited to:

- Unplanned pregnancy and teen birth

- HIV in the adolescent and young adult population
- Sexually transmitted infections
- Emotional and physical coercion in sexual activity

The point is obvious. This center works. Barriers to accessing care are dismantled; meeting teens in their own environment eliminates disparities. This clinic meets the students in a confidential setting where education, exams, and dispensing of contraceptives are achieved on site. Students are always encouraged to include their parents or families in decision-making about sexuality.

Future Plans: We need to replicate this service throughout the other high schools. Currently, we have three public high schools, two middle schools, and 10 elementary schools. The need for educational and clinical services is apparent at all high schools from our recent success. On-site educational and clinical services in the high school setting allow ease of access, confidentiality, and personal counseling within an environment that is neither restrictive nor intimidating. The opportunity for change is profound. We would like to implement a collaborative effort with the Public School System to introduce an abstinence curriculum into the middle schools, including sexuality and STDs in addition to clinical services.

PRIORITY: The YRBSS results reveal that CNMI youths are becoming more sexually active and are less likely to use condoms. Our priority for adolescents is to decrease sexually transmitted infection and to improve their access to prenatal care service.

Maternal Population –

Mortality - Top 5 leading causes of death in the CNMI for 2003 are:

1. Cancer
2. Heart Disease
3. Unknown
4. Renal Failure
5. Sepsis

Top 5 Leading Causes of Morbidity for 2003 are:

1. Chlamydia – 218
2. Shigellosis – 128
3. Tuberculosis – 44
4. Gonorrhea – 31
5. Fish Poisoning - 28

Pregnancy and Birth

<u>Prenatal Care</u>

Prenatal care and postpartum care are being provided at the Northern and Southern Community Wellness Centers. Service providers include women's health nurse practitioner, mid wife, family practitioner, and High-risk pregnancies are being cared for at the Women's Clinic.

CNMI continues to strive to get patients into early prenatal care. Unfortunately, most CNMI mothers engage their prenatal care after 22 weeks of pregnancy. While entry to care was earlier than in previous years, this remains the greatest challenge for the Department. Late prenatal care results in lost opportunities for medical intervention and, likely, an in increase in perinatal morbidity, particularly for our high-risk obstetrical population. Because the rate of diabetes and hypertension are so high in the CNMI, it is imperative to engage mothers in their first trimester to keep diabetes-related conditions from affecting the mother and baby.

Early access to care has a tremendous impact on the eventual designation in prenatal care for mothers. For women who presented to CHC before 20 weeks, the percentage of those who had "*Adequate*" or "*Intermediate*" prenatal care was 82% (same as in 2003). For those who presented after 20 weeks, the percentage of those with "*Adequate*" or "*Intermediate*" prenatal care was 8%.

The disparity between the quality of care delivered in these two populations is tremendous, and the pubic health impact cannot be understated. Clearly, the hospital and clinics are serving the patients and providing prenatal care in an adequate manner. The problem, it seems, is that pregnant women continue to be disengaged from the healthcare system until late in their pregnancy.

This theme has been repeated in year's past, and the CNMI Public Health Division, and the MCH Program, the Health Promotion Program, and the Breast and Cervical Cancer Program must continue to advance its culturally sensitive outreach capacity beyond the current status-quo.

Already, several important steps have been taken to break down selected barriers to care. Two outreach clinics have been fully staffed and are busy with low-risk prenatal care. Most of the care provided in these clinics is done at no cost (or at a minimal sliding fee scale). These changes are aimed at improving access to prenatal care, particularly in the first trimester.

Note: Some of the glaring disparity is due to the Kotelchuck designation of "all care presenting after the fourth month is automatically categorized as "*Inadequate*". Still, this point cannot be made too strongly: The single largest impediment to adequate prenatal care in the CNMI is a visit to CHC clinics in the first half of the pregnancy.

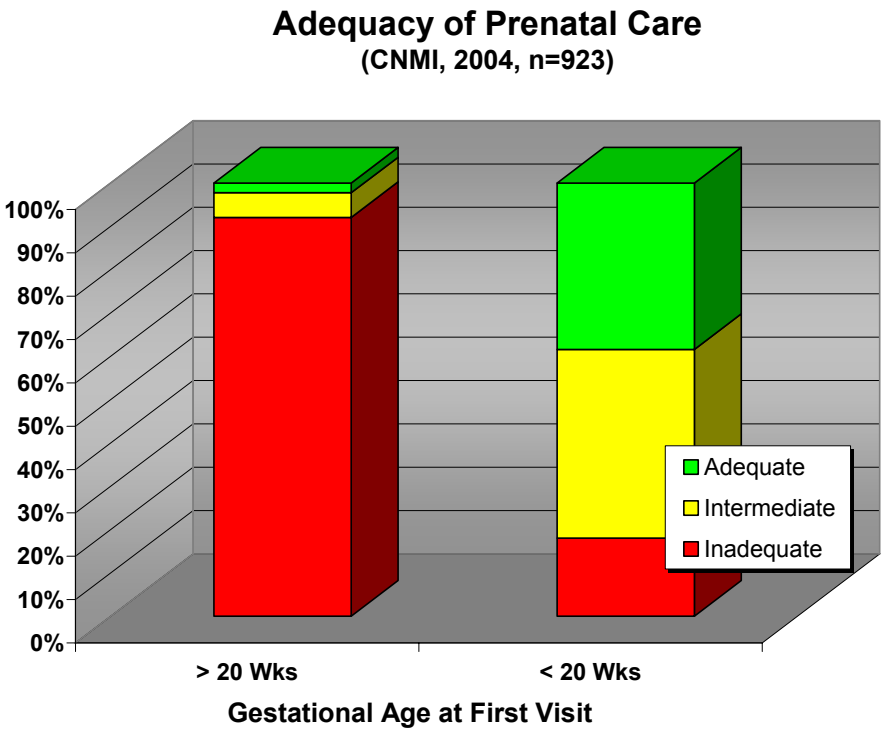
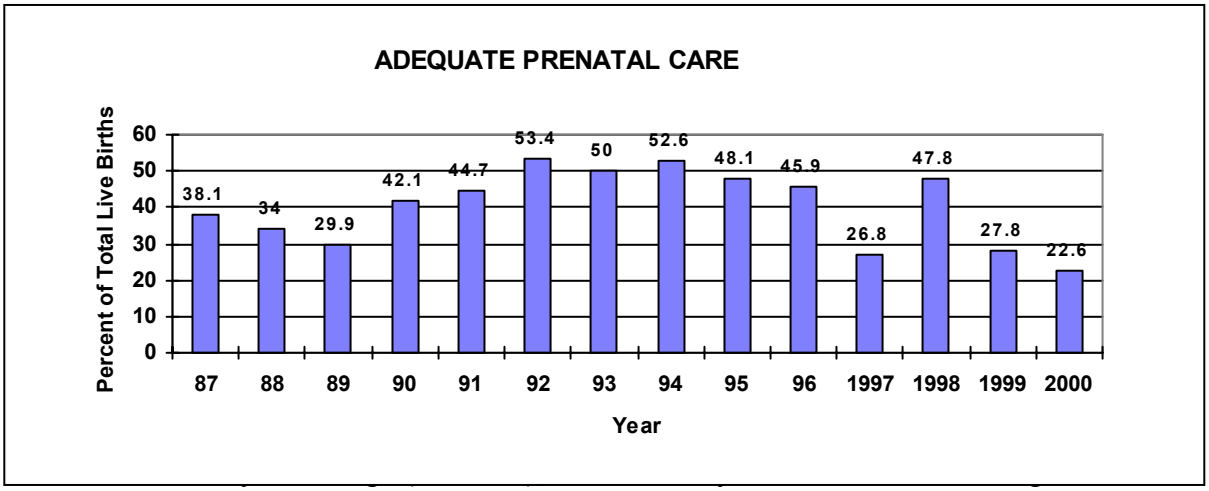


Figure 2. Adequate Prenatal Care CNMI 1987-2000



CNMI has continued to show modest improvements in many area of prenatal care. Nearly all indicators of prenatal care reveal increased access to care, earlier access to care, and improved Kotelchuck scores. In addition, CNMI DPH has improved key elements of data gathering necessary to report more accurate prenatal care data. We will continue to improve early access to care as a priority in 2005.

Fertility -

Table 31. Total Fertility Rate, 2000

Age (Years)	# of Women in Age Group *2000	Births/Age Group 2000	Age Group Fertility Rate
15-19	2254	138	0.061211187
20-24	5519	311	0.056352379
25-29	6929	402	0.058019374
30-34	5006	367	0.073311397
35-39	3725	171	0.045909796
40-44	2342	45	0.019211384
45-49	1532	0	0
Total	27307	1434	0.314015517

*Estimates based on CNMI census 2000 data. Total Fertility Rate = sum of Age Group Rates x 5 (0.314 x 5 = 1.57)

Total Fertility Rate = 1.57

Table 32. CNMI Fertility Rate Compared to Guam and U.S.

	15-49 years
CNMI	1.57 (2000)
Guam	N/A
US	2.1(2000)

Live Briths/1000 women aged 15-49 years
Total Fertility Rate = sum of Age Group Rates x 5 (CNMI)

Unintended Pregnancies

More than 55 percent of all pregnancies occurring in the Commonwealth of the Northern Mariana Islands were unintended in 2004. While the national baseline is at approximately 49% in 1995 (Healthy People 2010 9-1 objective), other industrialized countries report fewer intended pregnancies.

In the Institute of Medicine's 1995 report *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families,* the IOM's foremost recommendation calls for the nation to adopt a social norm in which all pregnancies are intended – that is, clearly and consciously desired at the time of conception. Emphasizing personal choice and intent, this norm speaks to planning for pregnancy, as well as avoiding unintended pregnancy.

Reducing unintended pregnancies is possible and necessary. Unintended pregnancy in the CNMI and the nation is serious, costly, and occurs frequently. Socially, the costs can be measured in unintended births, reduced educational attainment and employment opportunity, greater welfare dependency, and increased potential for child abuse and neglect. Economically, health care costs are increased. An unintended pregnancy, once it occurs, is expensive no matter what the outcome. Medically, unintended pregnancies are serious in terms of the lost opportunity to prepare for an optimal pregnancy, the increased likelihood of infant and maternal illness, and the likelihood of abortion. The consequences of unintended pregnancy are not confined to those occurring in teenagers or unmarried couples. In fact, unintended pregnancy can carry serious consequences at all ages and life stages.

With an unintended pregnancy, the mother is:

- less likely to seek prenatal care in the first trimester
- more likely not to obtain prenatal care at all
- less likely to breastfeed
- more likely to expose the fetus to harmful substances, such as tobacco or alcohol.

The child of such a pregnancy is at greater risk of:

- low birth weight
- dying in its first year
- being abused
- not receiving sufficient resources for healthy development

Table 33. Premature births, CNMI, 2002-2004

Year	# of Live Births	<37 wks EGA	Not stated
2004	1,343	**119**	20
2003	1,354	**136**	8
2002	1,294	**82**	20

Source: Health and Vital Statistics Office, DPH

Neonates requiring tertiary-level care are transported to Honolulu, Hawaii, or San Diego, California, resulting in a very heavy burden for the child, its parents and family, the community and the government.

Breast and Cervical Cancer

A total of 550 cases of cancer were observed for the eleven-year period 1991 to 2001. For cancer cases, the most common cancers seen were similar to the leading causes of cancer death, including breast cancer (accounting for 16% of all cases), lung cancer (12%), cervical cancer (11%), cancers of unknown origin (10%), and head and neck cancers (7%). Of the 304 cases of cancer in females, 29% were breast cancer, 20% were cervical cancer, 8% were of unknown origin, 7% were uterine cancer, and 5% lung cancer. There were 15,543 women aged 25-60 years that were identified as not having had a pap smear for the past 4 years. We have been collaborating with the two of the five private clinics to provide this service to these identified women. We will continue to have discussions with the other clinics in this matter.

At the Leadership Team Meeting, one recommendation we made is to conduct a session on Breast and Cervical Cancer and the services to the parents. We will begin with the Head Start Program parents for this school year and we already met with the President of the association.

Services targeting the maternal population:

GYN Clinic – provide consultation, including fertility counseling, and clinical services. This is provided at the wellness centers and the Women's Clinic. Please note that referrals for any complicated gynecological cases is referred to the Women's Clinic.

Breast and Cervical Screening Program – The Department of Public Health's Breast and Cervical Cancer Screening Program (BCSP) currently relies on funding deposited in the Tobacco Control Fund (TCF) from PL13-38. In line with achieving Public Health's Initiative to increase chronic disease awareness, early detection and prevention, funds received from TCF are used on education and awareness of breast and cervical cancer. Screening and diagnostic examinations are covered by BCSP using TCF funds to address early detection and prevention of breast and cervical cancer. Current appropriation to the Breast and Cervical Cancer Screening Program are not sufficient, and cannot realistically be considered a reliable funding source that can guarantee the continuity of the program.

ELIGIBILITY REQUIREMENTS:

- Low income
- Uninsured/Underinsured women
- CNMI residency status

SERVICES

- Pap Smear, Pelvic Exam and CBE ages 18 and over
- Mammogram (Diagnostic and Screening) ages 50 and over
- Mammogram (Diagnostic and Screening) under 50 yrs of age if high risk/symptomatic
- Transportation to clinic appointment

- Transportation of off-island (Rota/Tinian) program clients to Saipan
- Breast ultrasound
- FNA(Fine Needle Aspiration)
- Colposcopy
- Surgical Consultations
- Cervical Biopsy
- Breast Biopsy
- Case Manage abnormal cervical results for BCSP Program and Non-Program patients
- Case Manage abnormal breast results for BCSP program and non-program patients
- Send out letters of ALL pap smear results
- Send out reminders to BCSP clients of annual breast and cervical screening
- Pubic education on Breast and Cervical Cancer

CY 2004 Accomplishments:

- Procured and broadcasted 30-second radio spot announcements on breast cancer and cervical cancer prevention methods, risk factor and available resources that cover the cost of cancer screening examinations.
- Procured and advertised monthly outreach and education information on breast and cervical cancer in a local magazine that is available to the public at no cost.
- Procured and advertised weekly outreach and education information on breast and cervical cancer in a faith-based newspaper.
- Collaborated with the Women's Affairs Office in the planning and executing of the "Healthy Women ~ Healthy Families ~ Strong Community Symposium"
- Conducted public education and outreach on breast and cervical cancer at the 2004 Family Health Fair sponsored by Huggies, Marpac and Enfamil.
- Conducted the Pink Ribbon Contest where two private high schools and all four public high schools on Saipan participated.
- Collaborated with 'Imi Hale, a native Hawaiian cancer network, on the Chamorro translation of the breast health shower card.
- In 2004 there were approximately 2550 pap smears and 950 mammograms done. Of these numbers, 821 pap smears and 264 mammograms were funded by the Breast and Cervical Screening Program
- Conducted celebrity-bagging event for 2004 National Breast Cancer Awareness Month (NBCAM) at Price Costco to increase public education and awareness on breast cancer.
- Organized and operated the cancer information center for a local annual fundraising event focused on cancer.
- Funded courier services for the reading of mammography films by a radiologist in Guam.
- Conducted outreach efforts at an established screening site (WOW) at least twice a month.
- Conducted public education and outreach at the 2004 Heart of the Marianas Health Fair.
- Organized and conducted a joint proclamation by the Governor of the CNMI and the Mayor of Saipan, proclaiming October as Breast Cancer Awareness Month.

The program's goal in 2004 was to provide pap smear to 550 women and the total for December 2003 to December 2004 was 821. As far as mammogram, the target number was 250 and we provided 264 mammograms during the same time period. There were 15,543 women aged 25-60 years that have been identified who have not had a pap smear for the past four years.

Future Activities:

- *Open an evening clinic once a week to conduct pap test services.*
- *Extend breast and cervical screening program services to private healthcare clinics.*
- *Set up community sites to conduct pap tests.*
- *Conduct in-service education to health care providers on women needing mammogram screening.*
- *Perform the mammogram prerequisite of a clinical breast examination on women receiving a pap test.*
- *Expand mammography clinic schedules*
- *Conduct outreach and education sessions*
- *Conduct prevention interventions*

Prenatal Clinic – Again, this is provided at the wellness centers and the Women's Clinic. High-risk pregnancies are referred to the Women's Clinic. A prenatal education class is offered free to the patients. In addition, referral for dental health is also provided.

Results of Prenatal Care Focus Group:

Facilitators – MCH Coordinator and Breast and Cervical Screening Program Manager
Recorder – Administrative Assistant

Group One - 7 women

Background of participants: The ages of the participants were 29, 30, 31, 36, 43 (2), and 55. Their ethnicities were Chamorro (4), Palauan (2), Caucasian (1). They all have had babies and did state that they received prenatal care during their pregnancies. However, they don't remember at what trimester they received their first prenatal care and if they were consistent with their visits.

Meaning of "pregnant"
-loss of freedom
-restriction – food, activity, sleep
-more expensive, - clothes, food
-restlessness
-more health conscious
-hormonal imbalance

Why do women get prenatal care

-concern of health of baby
-excited about pregnancy
-want to know everything
-find out sex of baby
-high risk so need to go get prenatal care

What is involved in a prenatal care visit
-urine sample
-check baby's heart beat
-check blood pressure
-take off clothes – pap smear
-measurements
-iron pills
-doctor consultation
-check weight gain

Why do women not get prenatal care
-cost
-not knowing what to expect
-if have more than 1 baby already knows what to do and expect
-denial of pregnancy
-provider preference
-shame – don't know who will look at you and might meet people I know at the clinic (teens)
-lazy to go to the clinic
-not aware of importance of prenatal care
-hiding pregnancy (teens)
-fear of parents (teens)

Do you know where to go get prenatal care services
-where they take insurance
-public health clinic downstairs at the hospital by the dental
-private clinics

Recommendations to improve services
-more outreach at grass root level
-make it a requirement if enrolled in any welfare programs
-make it a pre-screening tool for any welfare programs
-Saturday clinic
-ethnic preference (local vs. outsider)

Group II – 10 women

Background of participants: The ages of the participants were 24, 33 (2), 34, 35 (3), 41, 42, and 44. Their ethnicities were Chamorro (5), Carolinian (1), Filipina (3), and

Pohnpeian (1). Like the first group, all these women have had babies and all responded that they did go for prenatal care services.

Meaning of being pregnant
-having a baby
-baby growing in you
-financial concerns – hospital bills for medicine and to deliver and also buying food and diapers for baby
-worried as far as if baby will come out healthy
-not ready
-scared if you can do it
-ai adai – getting labor pains again

What is involved in a prenatal care visit
-opening legs for the pap smear
-measuring my stomach
-learning, the nurses tell me things to do and about medicine
-they also tell me about food and about my teeth
-I get books to read about being pregnant and taking care of myself
-check my urine to see if I'm diabetic
-check my blood pressure

Why do women get prenatal care
-important for the health of the baby
-also important for the mother
-to make sure everything is fine with pregnancy
-so I can find out about things like if I'm diabetic because my mom is

Why do women not get prenatal care
-lazy to go to clinic
-don't want to take my clothes off
-other people tell me what to expect
-always been healthy
-waiting too long
-oh yeah, waiting is too long and the space is so small in San Antonio
-don't want to see the lady because I know she is not a real doctor
-appointment time is too long
-I have to see the doctor that is available
-a hassle to make an appointment
-staff not friendly – if encountered one staff is not friendly then I don't want to go there
-afraid
-no money or insurance
-no one to take me there

Do you know where to go get prenatal care
-at the hospital

-I go to Pacific Medical Center (private clinic)
-in San Antonio
-at the clinic downstairs because I'm on Medicaid

Recommendations to improve service delivery
-please hire women doctors
-please tell the staff to be nicer
-please recruit from other places, i.e. U.S.
-bring services out to the community
-inform the community

Family Planning - One important determinant of pregnancy and birth rates is contraceptive use. The proportion of all females aged 15-44 years who currently are practicing contraception in the CNMI is unknown. However, in the CNMI's 2004 Family Planning Annual Report, we recorded 1,471 unduplicated female family planning users of various methods. Using this known number of female family planning users, we can estimate that less than five percent of females within the total female childbearing population of the CNMI [30,703 women] utilize a family planning method through the CNMI Title X Family Planning program. Services are provided at the wellness centers and the adolescent health center. The program continues to work to prevent teen pregnancy and to reduce the numbers of unplanned pregnancies.

STD/HIV Prevention Program – Services are currently provided at the STD/HIV treatment and resource center located in Navy Hill, away from the hospital facility. The program staff includes a program manager, a case worker, one outreach worker, and an administrative assistant. A clinic is opened every Thursday and an internal medicine physician and a public health nurse come to the center to conduct the clinic. There is a need for the program to increase HIV testing in the community. Two staff have been trained and certified to do phlebotomy at the center. There has been an increase in high school students getting tested by accessing services at the Adolescent Health Clinic.

Current Accomplishment include submission of a grant application to tap into Global Funds to seek further support for trainings and financial needs regarding STI and HIV issues in the CNMI. Program staff has increased their collaboration with other departments/agencies to promote awareness targeting youth at risk.

Future Plans: The HIV/STD Prevention Program continues to collaborate with other health programs such as the Community Guidance Center, Family Planning, and Maternal & Child Health Program as well as outside agency like the Public School System's (PSS) Health Education and Promotion Program. We need to improve collection and reporting of data for STIs. At the present time the HIV/STD Program has a limited capacity to conduct HIV surveillance. Existing personnel will be trained to conduct effective surveillance. Finally, the program will procure simple rapid test kits for HIV. These test kit will be used during outreach activities. We are currently working to conduct a survey with the assistance from the HIV/AIDS & STI Surveillance Specialist from the Secretariat of the Pacific Community (SPC)

PRIORITY: Breast and cervical cancer remain the first and second most prevalent cancers and the first and third leading causes of cancer death in women in the CNMI. We need to increase the proportion of women aged 18 years and older who have ever received a pap test. We also need to increase the proportion of women aged 40 years and older who have ever received a mammogram.

PRIORITY: The majority of pregnancies occurring within the Commonwealth of the Northern Mariana Islands are unintended. We continue to struggle with low prenatal care rate for early and continuous prenatal care. Therefore, we need to promote and enhance the prenatal care education class.

Health Care System

Capacity – The Department of Public Health provides health care services through the Commonwealth Health Center, Southern Community Wellness Center, Northern Community Wellness Center and Women and Children's Clinic. The infrastructure of the Commonwealth Health Center was built to accommodate a population of 15,000 and currently the population is at 70,000. Rota Health Center and Tinian Health Center provides health care services in each perspective island. Dental services are provided at the Dental Unit. Table 34 shows the number of health care providers available on island. Please note that there are 5 private clinics on the island of Saipan. We have memorandum of understanding for the provision of immunization to children at three of these private clinics.

Table 34. Staffing patterns for Clinics

	Northern Community Wellness Center	Southern Community Wellness Center	Women's Clinic	Children's Clinic
Physician	.05 (F.P.)	.05 (F.P.)	4 Ob/Gyn	4 pedicatricians
RN (local)	2	2	0	0
RN (manpower)	0	0	4	4
Nursing Asst/LPN	1	3	0	0
Women's N.P.	1	1	1 (Midwife)	0
Ped. N.P.	.05	.05	0	0
Clinical Attd.	0	1	2	2
Clerk	1	0	0	0

Table 35. Division of Public Health Facilities Profile

Delegate Agency	City	Service Area	Office Hours	Clinic Hours
Southern Community Wellness Center	San Antonio Village, Saipan	Island-wide (located in southern area)	0730 – 1630 Monday – Friday	Same
Northern Community Wellness Center	San Roque Village, Saipan	Island-wide (located in northern area)	0730 – 1630 Monday - Friday	Same
Adolescent Health Center @ Marianas High School	Marianas High School	Marianas High School	0830-1500 Monday – Friday	0830 – 1230 Wednesday & Friday
Women's Clinic @ CHC (**referral site**)	Garapan Village, Saipan	All of CNMI	0730 – 1630 Monday – Friday	Same
Tinian Health Center	Tinian	Tinian	0730 – 1630 Monday - Friday	Same
Rota Health Center	Rota	Rota	0730 – 1630 Monday – Friday	Same

Patient satisfaction survey results:

The most recent survey was conducted in May 2004. 150 surveys were given to the Northern and Southern Wellness Centers. Our target was 10% of patients. A total of 219 patients participated in the survey. There were a total of 991 patients that were seen at both clinics thus the response rate is 22%. Questions that were asked involved rating the staff, facility, appointment, and overall satisfaction with the center, visit, and quality of care received. Response choices are excellent, very good, satisfactory, and poor.

Rate your appointment:

1. Promptness in scheduling your appointment – 51% very good and 37% excellent. 212 responses and 2 blanks.
2. Appointment available within a reasonable amount of time – 53% very good and 31% excellent. 210 responses and 9 blanks.
3. Waiting time in reception area – 55% very good and 27% excellent. 212 responses and 7 blanks.
4. Waiting time in exam room – 57% very good and 27% excellent. 205 responses and 14 blanks.

Rate our staff:

1. Friendliness and courtesy of the clinical attendant – 49% excellent and 44% very good. 216 responses and 3 no responses.
2. Professionalism and competence of the nurses and health care providers – 47% very good and 42% excellent. There were 212 responses and 7 blanks.

3. The provider provided adequate explanation and/or counseling – 58% very good and 33% excellent. 218 responses and 1 blank.
4. The provider took time to answer your questions – 53% very good and 35% excellent. 212 responses and 7 blanks.
5. Provider involved you in the decision making of your health care plan – 51% very good and 34% excellent. 202 responses and 17 blanks.
6. If student, staff encouraged involving parents or others in decision making of health care plan – 47% very good and 26% excellent. 178 responses

Rate our facility:

1. Hours of operation – 56% very good and 32% excellent. 218 responses and 1 blank.
2. Convenience of our location – 33% very good and 26% excellent. 151 responses and 68 blanks.
3. Overall cleanliness and comfort of facility – 39% very good and 24% excellent. 160 responses and 59 blanks.
4. Health information materials/resources – 45% very good and 19% excellent. 156 responses and 63 blanks.

Rate your overall satisfaction with:

1. The Health Center - 54% very good and 37% excellent. 215 responses and 4 blanks.
2. Your overall visit – 56% very good and 36% excellent. 219 responses.
3. The quality of health care received at the health center – 55% very good and 38% excellent. 219 responses.

Summary

The overall health picture for the CNMI Maternal and Child Health Population looks good considering the limited resources both in professionals and support staff available for the community. The dedication, commitment and competency of staff and the provision of comprehensive health care services are major strengths. The active collaboration and partnership with other departments/institutions has also strengthened the Division's capabilities in providing continuity of care. Its current efforts in providing training for staff will also sustain the management of programs for the community. Finally, the Division's work with the community as a whole to improve services will assist will result in the improvement of overall health status of the community.

In summary the priority needs for the CNMI are:

1. To decrease obesity among school-aged children.
2. To increase nutrition education activities in the schools.
3. To increase prenatal care rate for teenagers.
4. To increase the breastfeeding rate at 4 months. (The CNMI will not be reporting on this performance measure next year.)
5. To increase the percent of pregnant women who are screened for Chlamydia.

6. To decrease the rate of Chlamydia for teenagers aged 13-19 years.
7. The State Title V Agency formed a collaborative partnership with other service providers for CSHCN in formulation of policies, needs assessment, data collection and analysis, financing of services, and family support system/involvement. Please note that the CNMI will not be reporting on this performance measure next year. It will be reporting on #9.
8. To decrease the number of unplanned pregnancies. (**NEW**)
9. To increase the percentage of eligible infants with disabilities under the age of 1 receiving early intervention services. (**NEW**)
10. To increase the proportion of women aged 18 years and older who have ever received a pap smear. (**NEW**)
11. To increase the proportion of women aged 40 years and older who have ever received a mammogram. (**NEW**)