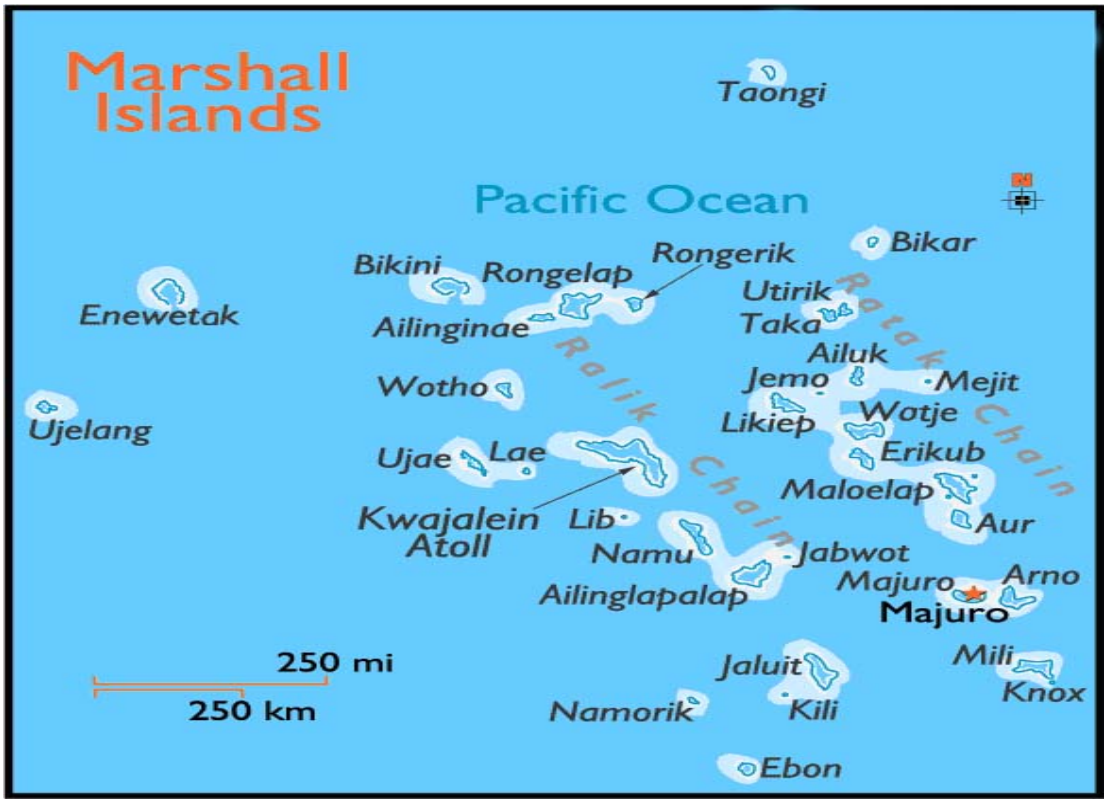
Republic of the Marshall Islands

Title V Maternal and Child

Health 2010 Needs Assessment



Republic of the Marshall Islands
Maternal and Child Health
Five Year Needs Assessment

I. Summary

As a grantee of the Maternal and Child Health Services Title V Block Grant Program, the Republic of the Marshall Islands (RMI) is required to do a statewide maternal and child health (MCH) needs assessment every five years. The needs assessment process outcome is the identification of priority needs for the maternal and child population groups.

The RMI Ministry of Health's (MOH) MCH Program is responsible to facilitate the needs assessment process and administers MCH grant funds. The mission statement of the Ministry is "To provide high quality, effective, affordable, and efficient health services to all people of the Marshall Islands, through a primary care program to improve the health statistics, and build the capacity of each community, family and the individual to care for their own health". To the maximum extent possible, the MOH pursues these goals using the national facilities, staff and resources of the RMI.

In 2010, the MOH key staff for various areas and programs met as a group to review and identify data and areas of concern. The following issues were identified as areas that needed improvement.

Pregnant Women, Mothers and Infants

1. Increase prenatal care in the first three months of pregnancy
2. Increase access to cancer screening, e.g. pap smear test and follow-up services
3. Management of high risk pregnancy
4. Decrease the RMI low birth weight rate
5. Expand newborn hearing screening
6. Promote health education/nutrition education throughout all MCH clinics

Children and Adolescents

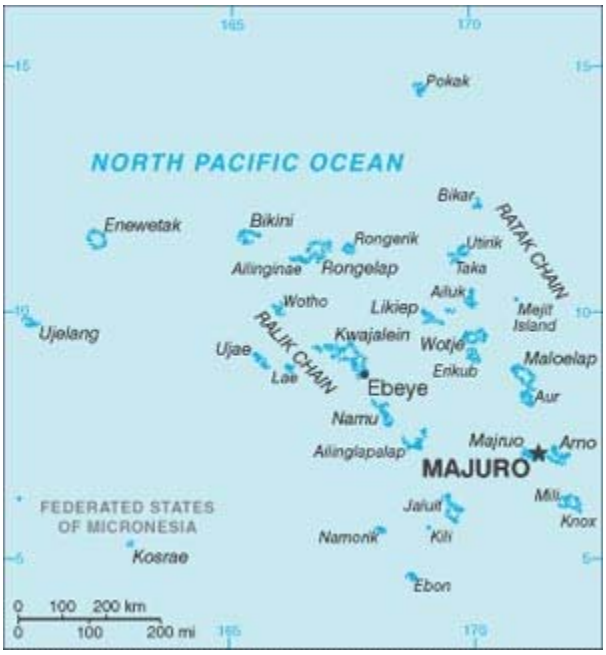
1. Decrease rate of teen pregnancy
2. Promote dental services in the schools up to grade 6
3. Increase family planning acceptors for teenagers
4. Promote sexually transmitted disease (STD) counseling and health information dissemination
5. Increase access to programs and services addressing the teenage population

Children with Special Health Care Needs (CSHCN)

1. Develop and implement a database system on infants who have special health care needs (SHCN) within 6 months after birth
2. Improve service delivery for CSHCN and families and follow-up services
3. Coordination of better referral for CSHCN to the program

Geography

The Marshall Islands consists of 29 atolls and five major islands, which form two parallel groups- the "Ratak" (sunrise) chain and the "Ralik" (sunset) chain. The Marshallese is of Micronesian origin. The matrilineal Marshallese culture revolves around a complex system of clans and lineages tied to land ownership. The Marshall Islands has an area of 1826 square kilometers and is composed of two coral atoll chains in the Central Pacific.



Bureau of East Asian and Pacific Affairs. January 2011

The Marshall Islands is a parliamentary democracy, constitutionally in free association with the United States of America. It has a developing fisheries and service-oriented economy. It is mainly a Christian nation with the majority of the population being protestant followed by Catholic and other religions. The two main urban centers (Majuro and Ebeye-Kwajelein atoll) have paved roads and with piped water and a sewer system. The island of Ebeye is considered to be one of the most densely populated places in the world, only second to Bangladesh/Dakka. While the majority of the RMI population is concentrated on the two main urban centers, it is important to note that a great portion is dispersed around the many islands/atolls. This makes the provision of comprehensive health services to the entire population a challenge. However, the development of fundamental services such as health care and education has, over many decades, developed and improved in the remote islands. Health services capacity is further enhanced through provision of on-site health visits and follow-up care from the urban centers through field trips including availability of case evacuation and referrals to the central hospital.

This established system is under RMI constitutional mandate, a responsibility of the Government.

Population

The population of the Marshall Islands is estimated to be around 55,000 in 2009 with equal gender ratio, however, females seem to be a percent less than males. The maternal and child health (MCH) population makes up about 70% while the over 45-59 year olds make up another 15% and the over 60 years is another 15%. It is a very young and large population that MCH Title V program serves.

Table 1: RMI Population Estimates by Five Year Age Group

Age Group	2006		2007		2008		2009		2010	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4	3,853	3,655	3,916	3,716	3,976	3,772	4130	3881	4141	3891
5-9	3,803	3,549	3,768	3,529	3,706	3,490	3804	3567	3813	3576
10-14	3,322	3,179	3,422	3,246	3,555	3,340	3729	3471	3801	3530
15-19	3,533	3,304	3,378	3,189	3,237	3,083	3144	3008	3121	2986
20-24	3,067	2,878	3,215	2,979	3,316	3,045	3329	3041	3277	3000
25-29	1,857	1,827	1,999	1,951	2,156	2,082	2299	2191	2448	2295
30-34	1,302	1,288	1,282	1,274	1,285	1,279	1324	1315	1379	1361
35-39	1,205	1,150	1,174	1,129	1,141	1,108	1119	1094	1074	1059
40-44	1,154	1,099	1,130	1,073	1,102	1,045	1079	1024	1045	996
45-49	1,004	1,037	1,018	1,034	1,030	1,026	1031	1013	1020	993
50-54	948	848	919	878	893	904	869	915	866	925
55-59	728	615	784	645	827	674	832	693	832	722
60-64	403	359	438	400	478	443	503	469	549	500
65-69	232	241	242	236	256	238	258	240	278	262
70-74	160	174	159	185	160	193	145	188	147	186
75+	173	215	177	216	180	217	148	215	147	220
Total	26,746	25,417	27,022	25,679	27,297	25,939	27,741	26,324	27,938	26,501

Source: EPPSO, RMI Population Projections, 2006-2010

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. The life expectancy for Marshall Islands' total population is 71.76 years.[1] Compared to the other Freely-associated states (Federated States of Micronesia [FSM] and Palau), RMI is not

[1] www.indexmundi.com/marshall_islands/

faring well in terms of life expectancy. The 45-59 year olds, although outside the MCH population, are the population entering the menopausal or pre-menopausal period and will continue to receive services from the MCH Program. Aged 60 years and over, are grand-parents who are most often responsible for families and grand children, and therefore, will continue to receive services from the MCH Program indirectly.

The Marshall Islands population is illustrative of a very young population. Based on three tables (1, 2 and 3), the MCH population is representative of 70% of the total population. This means that in the Marshall Islands, there are not many older people, those over the reproductive age, living. The median age for both genders is 21.8 years.[2]

Table 2: Females Ages 15-44 years Population by Reproductive Age

Age Group	2006	2007	2008	2009	2010
15-19	3,169	3,215	3,099	3,008	2,986
20-24	2,313	2,346	3,056	3,041	3,000
25-29	1,888	1,915	2,101	2,191	2,295
30-34	1,591	1,614	1,310	1,315	1,361
35-39	1,417	1,437	1,134	1,094	1,059
40-44	1,213	1,230	1,061	1,024	996
Total	11,591	11,757	11,761	11,673	11,697

Source: EPPSO, RMI Population Projection, 2006-2010

Health Services

The Marshall Islands has a well developed/organized primary/preventive and public health system. There are two main hospitals located in the two urbanized islands in the Kwajelien (Ebeye Hospital) and Majuro (Majuro Hospital) Atolls. Including the two main hospitals, there are an additional 56 health centers/health clinics located in the various islands that make up the Marshall Islands. The two main hospitals serve the urban areas including the surrounding islands through referrals and medical evacuation. The two hospitals provide primary/secondary and some tertiary care. However, most tertiary care patients are referred off-islands to hospitals in the Philippines and Hawaii (Tripler Army Medical Center). The health clinics in the Outer-Islands are staffed by Health Assistants who are locally trained and assigned to these clinics as primary care providers. The Marshall Islands MCH Title V program is one of the key programs in the Division of Public Health and provides the mandated services for the MCH population.

[2] www.indexmundi.com/marshall_islands/

The 177 Health Care Program (Victims of Nuclear Fallout of Bikini, Rongelap, Enewetok, and Utirik) Clinics provide primary health care services to the four atolls affected by the nuclear testing. A primary health care physician manages the 177 Clinics. The Department of Energy has a DOE Clinic which provides medical services to the nuclear patients. The Diabetes Wellness Center which is managed by Canvasback Missions, in collaboration with MOH, demonstrates that natural foods and an active lifestyle can reduce or replace the need for diabetic medications and provides a higher quality of life for the participants. Taiwan Health Center concentrates on developing health education materials and training programs primarily used in Non-Communicable Diseases (NCDs) like diabetes and also helps with outreach activities.

These health care services include, but are not limited to : a) clinical services in the hospitals and health center facilities and outreach activities; b) primary health care or preventive services in the hospital and health center settings, school and community compounds, house-to-house outreach; c) health promotions and educational activities, special projects with community groups; d) collection of data for the Health Information System to monitor health indicators, including monitoring and evaluation of health services and the health care systems.

In addition to the above mentioned government sponsored health care services, there is one private health clinic, one private dental clinic, and two private optometry practices in Majuro. All of the doctors practicing in the government and private clinics are licensed under the MOH's Medical Examining and Licensing Board to practice in the RMI.

II. Needs Assessment Overview

Each Fiscal Year, the RMI MCH at the MOH, receives approximately $252,495 from the Health Resources and Services Administration (HRSA)/Maternal and Child Health Bureau (MCHB) for the MCH Services Title V Block Grant. As a grantee of Title V funds, the RMI is required to complete a statewide needs assessment every five years to identify the priority needs for the three MCH population groups:

- Pregnant women, mothers and infants
- Children and adolescents
- Children with special health care needs

To conduct the RMI Maternal and Child Health (MCH) Program 2010 Five Year Needs Assessment, the MOH's MCH Program staff reviewed quantitative and qualitative data to provide necessary information to assess the needs of the MCH population groups. Throughout the process, the focus was on the MOH's Mission Statement: *To provide high quality, effective, affordable, and efficient health services to all people of the Marshall Islands, through a primary care program to improve the health statistics and build the capacity of each community, family*

and the individual to care for their own health. To the maximum extent possible, the MOH pursues these goals using the national facilities, staff and resources of the RMI.

The purpose of the needs assessment is to use the findings and recommendations to identify health priorities and improve and strengthen the MOH's Public Health and its partners' ability to respond to public health issues.

The process involved various departments and programs within the Ministry and other partners including community members to identify health priority needs and at the same time assess the capacity within the State to address these needs. This is a continuous and on-going process throughout the year as the needs may change depending on the situation(s) that may arise.

III. Process for conducting Needs Assessment Process

In conducting the needs assessment, the MCH Program included the 15 Year Strategic Plan and MOH's Portfolio in the process. The main aim was to cover the needs of the MCH population.

Methods for Assessing Three MCH Populations

The MOH established a committee to facilitate a process for ensuring stakeholder involvement in the development of the 2010 Title V Needs Assessment. The Committee included key staff from various departments and programs within the Ministry to be involved in evaluating the programs and services within the MOH, including the Reproductive Health (RH), MCH, CSHCN, and Family Planning (FP). The MCH Program also collaborated with other stakeholders from the Ministry of Education, Special Education, School Health, the Ministry of Internal Affairs, Parents' Organization, Youth-to-Youth-in-Health, Community Leaders, Women's Organization and the RMI Interagency Council.

During the past year, the Ministry has implemented the Fifteen Year Strategic Plan for 2001-2015 and the MOH Portfolio. During the period, the Secretary of Health and the senior staff from the Ministry conducted program evaluations on services provided by the Ministry. A Needs Assessment was also conducted to identify program areas of need. It was necessary to review all data and statistics to evaluate how the services are implemented based on the statistics and program presented.

During the year, the process of reviewing data and assessing the programs and services within the Ministry was conducted. The Office of Health Planning and Statistics continued to provide data on all RH/MCH programs and services for the senior staff to review. The Ministry used the documents listed below during the process of the needs assessment in order to evaluate the MCH program services.

1. MOH Annual Report 2009
2. The 2007 Statistical Reports from the National Economic Planning and Social Statistics Office (EPPSO)
3. MOH 15-Year Strategic Plan
4. MOH Annual Report 2006-2008
5. MOH Portfolio
6. Quarterly reports from each program area
7. Other related documents on RH and MCH, including CSHCN services

In addition, the Perinatal Committee has been re-established with staff from the Maternity Wards from the two hospitals, Public Health, FP, MCH, including CSHCN, the Medical Referral Office and the Office of Health Planning and Statistics. The Committee will continue to hold an annual meeting to discuss perinatal deaths and make recommendation to improve services.

Based on recommendations out of the meetings by the staff in the Ministry the following issues were identified as areas that need improvement:

- prenatal visits in the first 3 months (1st trimester)
- health/nutrition education during pregnancy clinics
- screening program and referral for CSHCN
- low rates of family planning acceptors
- home care or management for children and families with SHCN
- programs and services addressing the teenage population
- lack of parents, community awareness/understanding about the CSHCN services
- program data collection/system for program planning, monitoring, and evaluation of progress
- preventive services for womens' health, such as cancer screening and follow-up

Although Enabling Services are provided to the MCH population, the issues presented here show that there is a need to improve the coordination of services, increase community awareness, the involvement in the primary health care services and training of staff to improve coordination in providing services among programs, conduct local educational activities at the community level and improve collection of data in MCH. Coordination of services and other agencies is another area that must be improved in order to provide continuous health services to the population.

The programs in Public Health have already initiated steps to address these issues by conducting a seminar with traditional leaders in Majuro and Ebeye to discuss these prevention programs and how the traditional leaders can support and implement the needs as stated in their areas. Nurses who have been assigned to the zones have taken the initiative to work closely with these traditional leaders in coordinating the community outreach activities.

Under the Infrastructure Building Services, MOH's organization was restructured to strengthen coordination of services between programs in the Ministry. The MOH's Integrated Information System is in its first phase of implementation to improve recording and reporting of data and statistics in all areas. Refinements are continuously made to enhance the Ministry's data management capabilities.

Needs Assessment Partnership Building and Collaboration

The MOH is the State Health Department that, under the RMI Constitution, is the only agency that provides for high quality, accessible and affordable health care services to the population of the Marshall Islands. The Mission Statement clearly states the goal of the MOH:

"To provide high quality, effective, affordable, and efficient health services to all people of the Marshall Islands, through a primary care program to improve the health statistics and build the capacity of each community, family and the individual to care for their own health". To the maximum extent possible, the Ministry of Health pursues these goals using the national facilities, staff and resources of the Republic of the Marshall Islands.

The MOH is comprised of different bureaus headed by an Assistant Secretary of Health with a total of 524 staff in the urban centers, and Outer Islands and three offices. Three bureaus, namely the Bureau of Majuro Atoll Health Care Services (BMAHCS), the Bureau of Kwajalein Atoll Health Care Services (BKAHCS) and the Bureau of Outer Islands Health Care Services (BOIHCS) which provides direct health care service. In each Bureau, there is a Division of Primary Health Care. There are two hospitals and 57 health centers. The three offices are Office of Administration, Personnel, & Finance, Office of Health Planning & Statistics, and Office of Medical Referral Services.

The Division of Primary Health Care has the following divisions.

- RH/MCH/CSHCN Programs – conduct prenatal, post-partum, family planning, STD screening and treatment, high-risk and CSHCN clinics.
- Immunization Program – immunize the infants, children, adolescents and adults, including pregnant women who come for prenatal care.
- Communicable Disease Program
    - Tuberculosis (TB)/Leprosy Program – conduct screening and treatment for TB and leprosy during clinics, visits to the schools and communities and also during prenatal clinics.
    - STD/HIV Program – screening and treatment is provided in all the clinics, including prenatal and during outreach to the schools and communities in the urban center as well as those in the Outer Islands.

- Non-communicable Disease Program
    - Chronic Disease Control Program – provide treatment and screening for diabetes, hypertension, and cardiovascular in the clinics and outreach to the schools and communities, including gestational diabetes.
    - Comprehensive Cancer Program - register cancer patients, provide screening, and coordinate activities for cancer prevention and pathway to care.
- Well Baby Clinic - provide services to children like immunizations, breastfeeding, Vitamin A., deworming, counseling and nutrition.
- Health Promotion and Disease Prevention Unit - provide educational materials and sessions. They also conduct activities for promoting nutrition, physical education, and awareness for all the programs of the Ministry.
- Mental Health and Social Services - provide services to mental health patients and rape victims. Staff members provide counseling services, medication to clients who need to have prescribed drugs, conduct home visit(s) daily to assess the needs of the clients and their families and conduct a weekly support group meeting to ensure that families receive the support necessary for increasing their confidence in taking care of their family members who have special needs physically and/or are those enrolled in the Mental Health Program.

Dental Services are one of the departments in the Ancillary Services of the hospitals. The dental services provide clinical services for all three MCH populations, dental preventive services through the school sealant program, community outreach to the Outer Islands and CSHCN.

The BMAHCS, BKAHCS, and BOIHCS serve the populations of Majuro, Kwajalein, and Outer Islands, respectively. However, these three bureaus collaborate within to coordinate their programs to serve the total RMI population. Collaboration among the bureaus within the MOH is an integrated part of collaboration in providing the services, traveling to Outer Islands, patient care in the hospital and upon discharge, outreach clinics and activities both in the urban center and in the Outer Islands.

Assessment of Needs of Maternal and Child Health Population Groups.

During the past five years, data from the EPPSO at the RMI National Government describes the MCH population groups as the following.

Pregnant Women, Mothers and Infants

Table 3: The Maternal and Child Health Population, 2006-2010

Population	2006	2007	2008	2009	2010
Infants (<1)			1,663	1,652	1,630
Children (1-12)			18,100	18,227	18,311
Adolescent (13-17)			6,323	6,379	6,547
Women (15-44)	11,591	11,757	11,761	11,673	11,697

Source: EPPSO RMI Population 2006-2010

In 2007, the EPPSO conducted a review of the RMI 1999 Census. Based on the review, the 1999 Census did not include the migration in and out of people and actual registered births and deaths. A new set of population data was released in 2007. However, for 2006 and 2007, population data were released in a 5-year age group only. Although single age group population data was requested for 2008, EPPSO released another population table for 2008 and onward.

Table 4: RMI Population Development, 2006-2010

Year	Total	Male	Female
2010	54,305	27,938	26,501
2009	54,065	27,741	26,324
2008	53,236	27,297	25,939
2007	52,701	27,022	25,679
2006	52,163	26,746	25,417

Source: EPPSO RMI Population 2006-2010

Table 5: Teen Pregnancy for Mothers Whose Ages Are Between 15-17 Years

Description	FY 2005	FY 2006	FY 2007	FY 2008	FY2009
Teen Pregnancy	91	71	92	79	52
VLBW for Teen Pregnancy	1	1	1	1	1
LBW for Teen Pregnancy	22	8	24	19	12
Premature Teen Pregnancy	7	6	17	12	4
% of Teen Pregnancy from All Births	6%	4%	6%	5%	3%

Source: Vital Statistics, MOH. Based on Federal Guidance.

Due to the fact that the RMI age group for teenagers is less than 20 years, the MOH generated the following data based on RMI age groups:

Table 6: Teen Pregnancy for Mothers Whose Ages Are Less Than 20 Years

Description	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Teen Pregnancy	296	270	278	253	232
VLBW for Teen Pregnancy	2	3	2	5	2
LBW for Teen Pregnancy	55	46	61	53	43
Premature Teen Pregnancy	23	24	39	31	18
% of Teen Pregnancy from All Births	18%	17%	17%	17%	14%

Source: Vital Statistics, MOH

The RMI has one of the highest teen pregnancy rates in the region, if not among all MCH Title V grantees. While there is an overall decrease in the teen pregnancy rate, there is great concern for the under 15 years of age teen births. In the last three years, there have been a constant number of births occurring to this age group and is of grave national concern which has brought attention to the MOH. During this time, five births occurred to one thirteen year old, and four fourteen year olds. Four of these girls are from the Majuro urban area while the other one is from the Ebeye area. Table 7, also indicates a great proportion of births without the age of the mother. Upon investigation, it was found that almost all of these births occurred in the Outer-Islands and work is currently underway to decrease teen pregnancy there.

The distribution of registered births by mother's age shows the following. The pattern of birth in the RMI follows a normal curve. The majority of births are in the middle-age range where procreation/birthing is expected, however when compared to other areas in the region where average age for birth is in the late 20s to mid-30s, the RMI shows a very early age where most young women begin giving birth, early to late 20s.

The distribution of registered births by mother's age shows the following.

Table 7: Birth by Mother's Age

Age	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Stated	3	4	5	7	106
10-14	1	2	5	4	5
15-17	91	71	92	79	54
18-19	204	197	181	170	173
20-24	621	553	548	523	504
25-29	376	428	411	409	411
30-34	229	210	197	217	223
35-39	94	92	115	94	97
40-44	23	19	37	20	24
45-49	3	3	0	3	6
Total	1,645	1,579	1,591	1,526	1,603

Source: Vital Statistics, MOH

In FY 2009, the registered births increased compared to the previous years. There were 106 births listed without the mothers' ages. At the time of the calculation of birth data, these 106 did not have birth certificates but were counted on the monthly log sheets of the health centers from the Outer-Islands. Late registration is one of the problems in the Outer-Islands. The Office of Health Planning and Statistics is working with the concerned departments to increase the submission rate and accuracy in submission of birth events in a timely manner.

Very Low Birth Weight (VLBW), which is up to 1,500 grams) in the RMI, has increased. It is documented that VLBW occurs among mothers without prenatal care, teenage pregnancy and those with very late entry into prenatal care. Prematurity is still a problem in the RMI. It is found among women who seek prenatal care at a late stage of pregnancy or none at all. There is a need to put more effort into educating the community on the importance of early entry into prenatal care for pregnant women and early diagnosis of high risk pregnancy.

Table 8: Summary of Births

Description	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Registered birth	1,645	1,579	1,591	1,526	1,603
Crude Birth Rate Per 1000	32	30	30	29	30
LBW	214	205	206	210	202
VLBW	9	14	12	18	20
Premature	90	166	159	106	121

Source: Vital Statistics, MOH

Crude Birth Rate (called "crude" because it does not take into account age or sex differences among the population) is the number of births in a year divided by the total midyear population. The number is then multiplied by 1,000 to actually arrive at the actual crude birth rate. In FY2009, the RMI had 30 births per 1000 population.

Table 9: Maternal Mortality Rate

Description	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Maternal Death	1	2	0	0	4
Maternal Mortality Ratio Per 100,000 live births	61	127	0	0	264

Source: Office of Health Planning and Statistics, MOH

In FY 2009, the RMI had four maternal deaths. Preeclampsia, post-partum hemorrhage, obstructive labor and gestational hypertension were the causes of these four maternal deaths. Further research found that two of the births occurred in the Outer-Islands and were caused by post-partum hemorrhage. One of the other two deaths was at Majuro Hospital and was due to pre-eclampsia and the other one occurred in the Ebeye Hospital and was caused by gestational hemorrhage. Maternal mortality rate is calculated by the number of maternal deaths divided by the number of live births per 100,000. In FY 2009, RMI had 264 maternal deaths per 100,000 live births.

Infant Mortality Rates have fluctuated over the past five years as shown below.

Table 10: Infant Mortality Rate

Year	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Infant Death	33	38	51	47	42
Infant Mortality Rate	20	24	32	31	24

Source: Office of Health Planning and Statistics, MOH

Infant mortality rate is the number of infant deaths divided by the live births within a given period of time per 1,000.

Table 11: Top Main Causes of Infants Deaths: 2005-2009

FY 2005		FY 2006		FY 2007		FY 2008		FY 2009	
Diagnosis	**#**	**Diagnosis**	**#**	**Diagnosis**	**#**	**Diagnosis**	**#**	**Diagnosis**	**No**
Prematurity	6	Prematurity	7	Prematurity	9	Prematurity	9	Prematurity	7
Asphyxia	6	Asphyxia	5	Asphyxia	4	Pneumonia	3	Asphyxia	5
Meningitis	4	Congenital Heart Disease	5	Congenital Heart Disease	3	Congenital Heart Disease	3	Septicemia	4
Congenital Heart Disease	4	Sepsis	5	Pneumonia	2	Pneumonia	2	Congenital Heart Disease	2
Sepsis	3	Septicemia	4	Sepsis	1	Sepsis	3	Sepsis	2
Congenital Abnormalities	3	Meconium Aspiration Syndrome	3	Meningitis	1	Sudden Death syndrome	1	Meningitis	1
Septicemia	2	Meningitis	2	Unknown	1	Hypoxic Ischemic Encephalopathy	1	Meningococcemia	1
Respiratory Failure	1	DOA	2			Birth Trauma	1	Dehydration	1
Pneumonia	1	Unknown	2			Complications of Primary Varicella Zoster	1	Pneumonia	1
		Malnutrition	1			Unknown	1	Pertussis	1
		Intracerebral Hemorrhage	1					Drowning	1

Source: MOH, Office of Health Planning and Statistics, 2009

Table 12: Summary of Registered Deaths

Description	FY 2005	FY 2006	FY 2007	FY 2008	2009
Registered Death	294	316	276	299	339
Crude Death rate Per 1000	6	6	5	6	6
Infant Death	33	38	51	47	38
Infant Mortality Rate	20	24	32	31	24
Fetal Death	16	26	21	13	19
Child Death (U5)	46	54	63	56	52

Source: Office of Health Planning and Statistics, MOH

Assessment of Infant Mortality shows that 50% of all infant deaths occur during the neonatal period while the other 50% are post-neonatal deaths. As shown in Table 12, prematurity, and asphyxia followed by septicemia/pneumonia and congenital anomalies are the leading causes of infant mortality. Many of the RMI infant deaths are preventable. Further discussion regarding planning and prioritization of resources should occur with the RMI Minister, Secretary and the medical team.

New Born Hearing Screening

The RMI received a three year (HRSA-MCHB) grant that will support the establishment of a Newborn Hearing Screening program. The screening program will be established in the main hospitals. For the first year of the grant, Newborn Hearing Screening will be established in Majuro Hospital. The Ebeye Hospital Newborn Hearing Screening program will be established in the second year.

In May 2010, the Newborn Hearing Screening was implemented in Majuro Hospital. Equipments were purchased. The database was installed. Policies and guidelines were developed and implemented. Trainings were conducted for the nurses.

By May 2011, the Newborn Hearing Screening program will be evaluated and a progress report will be provided.

Pregnant Women

It is indicated that a total of 4,895 visits occurred during FY 2009, including first and return visits. Table 13 below shows that there were a total of 1,537 first visits during this period.

Table 13: Prenatal Care

Type	FY 2007	FY 2008	FY 2009
Total Visits All Trimesters	3,383	3,100	4,895
Number of 1st Visits	1,152	1,215	1,537
1st Trimester	1,248	961	879
2nd Trimester	1,102	1,081	1,615
3rd Trimester	1,033	1,058	2,401

Source: MCH/Reproductive Health Program, 2009

The percent of pregnant women who visit prenatal clinics during the first trimester of their pregnancy remains low at 18%. Although the Ministry encourages pregnant women to attend prenatal care during the first three months of pregnancy, most pregnant mothers seek prenatal care during the second trimester, and this accounts for 33% of the first prenatal care visits during the fiscal year.

Some of the health centers and the two main hospitals provide prenatal care services for pregnancy management, STD/HIV screening, Pap smear screening, oral health, and immunizations.

Family Planning

Pregnancy rates among adolescents have been a source of concern. The teenage pregnancy rates are very high. 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.

Counseling on nutrition and FP are provided for all pregnant women attending prenatal clinics during the first visit which is a part of the interview during booking/registration for entry into prenatal care services. It is also provided in the follow-up upon delivery and again during postpartum

Table 14: Family Planning Users

Method	FY 2007	FY 2008	2009
3 Month Hormonal Injection	701	1,741	933
Oral Contraceptive	296	608	395
Hormonal Implant	159	91	308
Female Condom	16	29	13
Male Condom			57
Emergency Contraceptive Pill	9	7	0
Method Unknown		2	3
Fertility Awareness Method	2	5	3
Other Method (e.g. traditional, withdrawal, calendar, douching)			31
Vasectomy			1
Female Sterilization	142	114	57
Total	1,325	2,597	1,801

Source: FP and Health Planning & Statistics, MOH

Cervical and Breast Cancer

Table 15: Cancer Registry (New Cases)

Cancer Site	FY2006	FY2007	FY2008	FY2009
Breast	7	0	4	5
Cervical	6	5	5	14

Source: Cancer Registry

Table 16: Cervical and Breast Cancer Death

Cancer Site	FY2007	FY2008	FY2009
Breast	1	2	5
Cervical	3	4	3

Source: Office of Health Planning and Statistics

Cancer is the second leading cause of death in the RMI. Breast, cervical, liver and lung cancers are the RMI's most common types of cancer.

The National Comprehensive Cancer Program (NCCP) Cancer Registry was developed to link with the Medical Records, Laboratory, and Vital Statistics for confirmed cases and possible cases of cancer. The RMI Cancer Coalition is an organization with membership from the

community and private sectors in partnership with the MOH that promotes awareness on cancer prevention. Cancer survivors have organized themselves as well to promote awareness and provide support needed to individual survivors. The NCCP coordinates with various programs in the Ministry, other Ministries, community, and NGOs for activities that will help the community in fighting cancer. Health promotional materials were developed for distribution to the community.

Children and Adolescent Population

The estimated population for children ages 1 to 17 years is 24,858.[3]

Immunizations

The immunization coverage rate for children age 19 to 35 months is completing the DTaP-4, OPV-3, HepB-3, HIB-3, and MMR-2 series vaccinations based on the immunization program protocol.

Aside from the availability of immunization services in the two main hospitals, nurses go to the community and to the Outer Islands to immunize children. As a nation, there were a lot of challenges in reconciliation of data due to duplicate registration of children, multiple names given to a child, movement of children with families from one zone to another or from one island/atoll to another or migrating out, and availability of transportation from the urban centers to Outer Islands.

The Outer-Islands Health Care Services' Immunization Program's major constraints are the unavailability of transportation and lack of solar refrigeration to store the vaccines. Outer Islands Health Care Services attempted to address these constraints by renting private boats to reach the population which was very costly to the program. Despite the transportation problems, the Immunization Program managed to reach 21 atolls and increased Outer-Islands' immunization coverage for children 19-35 months of age to 71% in FY 2009. The Immunization rate for Majuro increased by 2% in FY 2009. There has been no outbreak of preventable diseases since 2003.

[3] Office of Health Planning and Statistics

Table 17: RMI Immunization Coverage Rate: 2007-2008

Islands	FY 2007	FY 2008	FY 2009
Majuro	95%	92%	94%
Ebeye	92%	96%	98%
Outer Islands	51%	60%	71%
RMI	79%	83%	89%

Source: National immunization Program, MOH

Sexually Transmitted Diseases

Sexually active teenagers are at high risk for STDs. The highest rate for STDs are found in sexually active teenagers, 15 to 19 years of age with the second highest rate found in 20-24 year olds and third highest among ages 25-29 years.

STDs still rank as one of the greatest health burdens in the community, particularly among the youth who are at the greatest risk due to their poor sexual behavioral practices. The social stigma attached to STDs is a barrier to treatment and to prevention of spread because infected individuals (both asymptomatic and symptomatic) are unlikely to seek and receive diagnostic services.

Table 18: STD/HIV Cases

STI	FY 2007		FY 2008		FY 2009	
	Positive Case	Prevalence Rate	Positive Case	Prevalence Rate	Positive Case	Prevalence Rate
Syphilis	289	548	302	567	486	904
Gonorrhea	36	68	27	51	107	199
Chlamydia	27	51	67	126	393	731
Hepatitis B			104	195	77	143
HIV	2	4	3	6	10	18

Source: STI/HIV Program, Majuro and Ebeye Prevalence rate is per 100,000

Out of the 393 cases of Chlamydia in 2009, more that 50% (184) are pregnant women who are routinely screened at the Prenatal Clinic. All pregnant women who were screened positive for STD received treatment and follow-up care. If left untreated, babies from infected mothers may have conjunctivitis, blindness, and neonatal pneumonia.

Newly Diagnosed HIV Cases 2008-2009[4]

	0-14	15-19	20-24	25-34	35-44[5]	Total
Male	2		1	2	1	
Female			3	1		
Total	2		4	3	1	10

Source: RMI Ungass Country Progress Report - *Reporting period: January 2008–December 2009*

The data available in relation to those diagnosed with HIV is sensitively considered in small island states such as RMI. Given the close ties of family and friends across the community, the MOH has made only general demographic data available in relation to those cases diagnosed between 2008 and 2010:

- Age range – all under 30 years, most in 15-27 year age range
- Most are unemployed and not at school
- Most attained mid-level high school
- Most are from urban settings
- Primary mode of transmission is thought to be heterosexual

The majority of cases were diagnosed as a result of presentations at the clinic due to apparent symptoms, or through tracing from such presentations. Only two cases emerged through the screening of those groups subject to mandatory screening in accord with the RMI National Guidelines for HIV Care and Prevention – one of which was as a result of a routine blood screen when a blood transfusion was sought for a family member, subsequently, also diagnosed with HIV. The other diagnosis arose as a result of ANC screening. The two cases of perinatal HIV resulted in HIV+ infants who are being cared for under the HIV protocol where regularly scheduled monitoring/treatment and follow-up care are provided. Under this protocol, the cases are managed by a special case management team. The members of this team work anonymously to assure confidentiality of patients.

[4] STD & HIV Annual and Quarterly Program Reports, MOH, 2008-2010;

[5] Includes one cases diagnosed elsewhere and relocated to RMI in 2009 and seeking care

Suicide Data

Table 19: Suicide Deaths among Youths Ages 15- 19 Years

Description	2005	2006	2007	2008	2009
No. of deaths	3	2	1	2	4
15-19 Population	6409	6837	6568	6319	6152
Rate/100,000	46.8	29.3	15.2	31.7	65.0

Source: MOH, Vital Statistics, 2009

The majority of suicide cases identified are alcohol related and done during the height of their intoxication. The Division of Mental Health and Social Services and Health Promotion are working together with the community, church leaders, and schools to address this problem and presentations and meetings are conducted to reach the community.

Oral Health

Table 20: MCH Oral Health Services FY 2009

	Majuro/Outer Islands	Ebeye
Target: Youth and Adults		
Number of restorative procedures done annually	2,822	1,054
Number of prenatal clinic users with annual dental/oral exams	480	118
Total Number of Dental Encounters	12,763	3,560
Target: Infants and Children		
Number of infants or children who received fluoride varnishing	1,534	284
Number of children who were given dental/fissure sealants	1,525	356
Number of schoolchildren who received annual dental examination	1,252	474
Number of schoolchildren who receive health talks on oral hygiene	1,252	755
Target: Youth and Adults		
Number of restorative procedures done annually	2,822	1,054
Number of prenatal clinic users with annual dental/oral examination	480	118

Source: MOH, Dental Program, 2009

Dental staff visit the schools every year to provide sealants for students in Head Start and grade 1, 2, 6, and 7. A weekly clinic is held for children who are six months to four years of age for fluoride treatment and educating their mothers on the proper cleaning of teeth. All the children in the Fluoride Varnish Program received tooth brushes and toothpaste during each visit.

Unintentional Injuries

Table 21: Deaths to Children Up to 14 Years Caused by Motor Vehicle Crashes

Description	2005	2006	2007	2008	2009
Rate Per 100,000	13.6	4.7	18.5	9.2	8.9

Source: Office of Health Planning and Statistics

It is mandated by law to use motor vehicle seatbelts at all times but it is not being observed by everyone. There are also public safety laws on school zones and pedestrian crosswalks. The MCH program staff works closely with Public Safety for the observance of the laws and with Health Promotion to promote public awareness. To improve passengers' safety in cars, the Marshall Islands Congress passed a law in 2010, making it illegal to ride in the back of pick-up trucks. If passengers ride in the pick-up trucks, they should sit down in the bed and not on the sides.

CSHCN

Table 22: CSHCN New Cases

Diagnosis	**2006**	**2007**	**2008**	**2009**
Joint/Bone Deformity or Fracture	41	52	83	87
Hearing Problems	5	7	0	0
Burns (any kind)	6	6	0	5
Cleft Palate	2	3	14	5
Clubfoot	0	2	0	0
Congenital Deformity	0	0	3	0
Eye Problem	8	0	0	0
Cardiac	5	7	1	2
Others - Extra Fingers	4	14	0	5
Others – Arthritis	4	2	0	0
Others – Paralyze	3	2	0	0
Others – Seizure	0	2	0	0
Developmental Delay	0	1	0	0

Total	78	98	101	104

Source: MOH, CSHCN Program, 2009

Table 22 shows that during FY 2009, there were 104 new cases that were identified and confirmed with different types of disabilities that affect children's activities of daily living. Due to island geographical distances with the shortage of trained staff to provide the screening needed for identifying CSHCN, the need to improve the CSHCN service delivery remains a challenge. Better coordination among service providers, including the community leaders and health assistants in the Outer Islands, must be improved.

The children born with SHCN are screened after delivery. The MCH program conducts outreach on a regular basis to identify those who must be seen by a physician. Those children who live in the Outer Islands are brought in to the urban centers for annual follow-up and return home. Those children who need further treatment and follow-up will be referred to Honolulu Shriners' Hospital. From time to time, specialists from Honolulu will visit the RMI to follow-up with all the cases registered in the CSHCN program, and at the same time, provide screening opportunities. Children who live in the Outer Islands are then called in on the national radio program to travel to Majuro or Ebeye to see consultants coming either from Honolulu or other places such as the Philippines. The RMI MCH Block Grant pays for travel and stipends (one to two weeks of financial support) while the child receives medical care in Majuro or Ebeye.

One obvious barrier to care for CSHCN in the RMI is the lack of local provider specialists. Children who live in the Outer Islands do not have access to the necessary health care services in the two urban hospitals. However, the MCH program has established a tracking system to monitor all the registered cases of CSHCN to ensure that health care services from other sources are provided to them on a regular basis.

MCH Program Capacity by Pyramid Levels

1. Direct Health Care Services

The health care system in the RMI is provided through two hospitals located in Majuro and Ebeye and 57 health centers that are scattered in the 29 inhabited islands and atolls throughout the RMI. Majuro Hospital and Ebeye Hospital have a bed capacity of 101 and 45, respectively.

Direct health care services are accessible in the two main hospitals in Majuro and Ebeye. Although prenatal clinics are held in a public health setting, an obstetrician-gynecologist (OB-GYN) physician provides health services in prenatal clinics for pregnant women and performs their deliveries in the hospital.

Prenatal care is provided in the Division of Primary Health Care under the RH Clinics. Services provided to pregnant mothers include support services from the laboratory, dental services,

family planning, immunizations, nutrition counseling, STD tests, and pharmaceuticals. The pregnant women are referred to the two hospitals for delivery. Community outreach is conducted daily by the public health zone nurses who refer any identified pregnant woman to the prenatal clinics.

The maternity ward fosters babies to room-in with their mothers so that the mothers can care for and bond with their baby immediately after delivery. This also provides an opportunity for the mother to breastfeed her baby. The MOH Breast Feeding Policy was approved in 1994 to have all babies born in the hospital to be breastfed while in the hospital until discharge. The policy does not allow mothers to bring formula inside the hospital maternity ward. Upon discharge from the hospital, the Maternity nurses will provide the mother and the newborn appointments to visit the RH Clinic for postpartum and well baby clinic in Public Health.

As part of Marshallese culture, the pregnant woman may bring a traditional birth attendant who will stay with the mother to monitor her condition along with the maternity ward nurses. The training of traditional birth attendants is conducted by the MOH to ensure they understand the procedures and other needs of the mother during delivery. Once the baby is born, the pediatrician will examine or screen the baby for abnormalities. In May 2010, as part of the services given to newborn babies, the MCH program initiated the Newborn Hearing Screening program at Majuro Hospital. Nurses from the Obstetrics and Maternity Ward were trained to perform the screening. Also, infants continue to be monitored for any abnormalities during Well Baby Clinic and regular visits in the hospitals. Once a child is identified as having SHCN, the physician will perform a medical evaluation in order to plan for further medical services on-island or off-island.

The screening of STDs and other infectious diseases is provided during prenatal clinics. Treatment of STDs is provided throughout the clinical visits as soon as detected. Pap smear testing is provided during prenatal clinics and to all women who visit obstetric clinic and public health clinics for physical examinations for school entrance and food handling.

Tetanus Toxoid is provided to pregnant mothers.

Dose of TT or Td	When to give	Expected duration of protection
1	At first contact or as early as possible in pregnancy	None
2	At least 4 weeks after first dose TT or Td	1-3 years
3	At least 6 months after second dose of TT or Td or during subsequent pregnancy	At least 5 years
4	At least 1 year after third dose of TT or Td or during subsequent pregnancy	At least 10 years
5	At least 1 year after fourth dose of TT or	For all childbearing years and possibly

	Td or during subsequent pregnancy	longer

Source: MOH, CSHCN Program, 2009

High risk pregnant women are referred to High Risk Clinic. Factors that constitute a high risk pregnancy are previous cesarean section(s), multiple birth(s), multi-parity (greater than 5), history of hypertension, pre-eclampsia, diabetes or existing medical problem(s), mother whose age is greater than 35 years old, and teenage pregnancy. The high risk pregnant women are closely monitored. If needed, they may be admitted to the hospital so that the physician can monitor them.

After delivery, RH nursing staff provides family planning counseling and availability of family planning options.

Outer-Islands: Delivery of health care services in the Outer Islands is provided through the 57 health centers. Health centers are equipped for outpatient and inpatient services and medical supplies. Four out of the 57 health centers have a physician on staff and the rest are staffed by health assistants. The population of the Outer Island communities ranges from 80 to 500. Fourteen out of the 53 health centers are managed by a female health assistant. Although direct health care is provided in these health centers, not all pregnant women can access prenatal care because of cultural barriers e.g. the health assistant is a male and is related to the pregnant women. Each health center is equipped with a radio communication system. With the recent development on the RMI telecommunication, some islands have both a telephone and an internet system. There is also a Wavemail system that uses a radio signal in sending email to Majuro and outside the RMI. This is still in the implementation stage and health assistants need training in this technology.

Health assistants have been trained to provide prenatal care and perform services such as immunizations, and STD laboratory testing, and assist with dental services when the outreach team from the main hospitals come to the atoll or island.

If there is an emergency in the Outer Island, the Health Assistant radios the main office of the BOIHCS located in Majuro for assistance and medical evacuation as needed. Medical evacuation can be done by air and sea.

State's Capacity/Strengths to provide Direct Health Care Services

- Immunization services are free and are available in the clinics and through outreach team visits.

- Prenatal Clinic services are free in the urban centers and the Outer Islands health centers.
- FP services are free in the urban centers, Outer Islands health centers, and Youth-to-Youth-in-Health.
- Medical evacuation for needed and emergency cases from the Outer Islands are funded by the MOH.
- Newborn hearing screening is available and will expand to the other main hospital in 2011.
- Off-island care for CSHCN is provided through the Medical Referral Program.
- The MOH Outreach team provides services to the community.

Weakness and Challenges

- Lack of health care provider e.g. OB-GYN
- Transportation problems e.g. unavailability of local airline flight due to mechanical problem
- Collection of data
- RMI's population does not assume the responsibility for their health
- Cultural barriers in accessing the health care i.e. pregnant woman cannot visit prenatal clinic because she is related to the male health assistant
- Lack of electrical supply to store vaccines
- Distance of atolls

Opportunities

- Full implementation of MOH Integrated Information System for data collection
- Hiring of new staff
- Collaboration with the community

2. Enabling Services

The health care system allows for any individuals in the RMI to have access to direct health care services.

The RMI have universal health insurance. It is run by the Office of Medical Referral Services. All Marshallese citizens receive the Basic Health Plan. For in-island medical services, the Marshallese pays only $5 for an outpatient visit, $17 for emergency room (ER), and $5 for hospital admission. For off-islands referral, the Medical Referral Services have a medical referral committee that reviews the cases and approves or denies the case depending on the guidelines of the committee. Foreign workers are required to fulfill the one year contribution

to the Marshall Islands Social Security Administration (MISSA) and have working papers to avail the Basic Health Plan. The MOH provides services to all populations of RMI and does not deny services to anyone.

The cost of delivery for a pregnant woman is $5 for those with Basic Health Plan eligibility and $115 for ineligible women. Ineligible women are those who do not have insurance because they are Non-Marshallese without working papers or Non-Marshallese dependent(s).

The outreach team is available to provide health services to the Outer Islands and even to the communities in the urban center. The outreach team is composed of dental, immunization, health promotion, RH, STDs, laboratory, and chronic disease staff.

State's Capacity/Strengths

- The MOH outreach team provides services to the community.
- The MOH does not deny any medical services to anyone.
- CHSCN receive the medical care they need.
- Resources are shared within the MOH.

Weakness/Challenges

- Limited staff
- Lack of transportation problem e.g. mechanical problems of AMI planes.

Opportunities

- Collaboration with partners
- CSHCN survey
- Newborn Hearing Screening implementation at Ebeye Hospital

3. Population-Based Services

a. Mothers and Infants
    - Immunization
    - Oral Health
    - Prenatal Care
    - Family Planning
    - Newborn Hearing Screening
    - Well Baby Clinic
    - Outreach
    - Health Education

- Mental Health
- STD/HIV Clinic
- Chronic Disease Clinic

b. Children and Adolescents
    - Immunization
    - Oral Health
    - School-based clinic
    - Outreach
    - Health Education
    - Mental Health
    - STD/HIV Clinic
    - Chronic Disease Clinic
    - Family Planning

c. CSHCN
    - Referral
    - Outreach
    - All services available in the hospitals and health centers

The RMI's National Immunization Program conducted its HPV Campaign, Seasonal Influenza and H1N1 mass vaccination. It also implemented the Universal Newborn Hearing Screening at one hospital in 2010.

Capacity/Strengths

- Referral system for CSHCN
- Availability of health promotional materials in all Public Health Clinics and Outpatient Clinics
- Availability of services to the MCH population
- Community participation
- Public awareness campaigns

Weaknesses/Challenges

- Limited staffing
- Lack of transportation problem e.g. mechanical problems of AMI planes

Opportunities

- Community partnership
- Importance of Non-communicable Disease prevention in MCH population

Infrastructure-Building Services

There is a memorandum-of-understanding (MOU) between the MOH, Ministry of Education, College of the Marshall Islands, Head Start Program and Local Government. This MOU serves as a basis of understanding that services for CSHCN will be coordinated between these agencies to ensure that CSHCN are not neglected.

Medicaid and Supplement Security Income (SSI) are not part of the MOH health care system since the RMI is not eligible for these programs. However, federal funding under the Title V MCH Block Grant and the Centers for Disease Control (CDC) and Prevention Immunization program is provided to conduct school outreach and school health programs. The staff in Public Health completed the Immunization Plan to implement the Immunization Act in the schools to have all students complete their immunization requirements before entering schools and have sealants applied to dental fissures of students in grade 1, 2, and 6. A School Health Program Coordinator ensures that schools are in compliance with the legislative mandates. The staff in the Immunization Program has already met with school principals and staff from the Ministry of Education to discuss the school health programs.

The MOH is implementing its MOH Integrated Information System. The focus is to provide the needed database for all the services that MOH provides. This project will cover Majuro, Kwajalein, and Outer Islands. It is a long process and it began with Majuro.

MOH is in the process of conducting a quality assurance (QA) survey in all its services. It began with Majuro and Ebeye, Kwajalein. This is a continuous process to assess the QA status and maintain quality services in all departments.

Continuing education for health force workers is ongoing. Distance learning courses are offered by the World Health Organization Pacific Open Learning Health Net. The MCH program conducted training for nurses on Universal Newborn Hearing Screening. One Public Health RMI nurse graduates from the Midwifery Program in Fiji annually and has for a number of years.

Capacity/Strengths

- Continuing education for the staff
- Community collaboration
- Quality Assurance and Quality Improvement program

Weakness and Challenges

- Access to timely reporting
- Linkage of data between departments

Opportunities

- Implementation of integrating the databases in MOH
- Improvement of services through recommendation of QA report

Selection of State Priority Needs

The MOH established a committee to facilitate a process for ensuring stakeholder involvement in the development of the 2010 Title V Needs Assessment. The Committee included key staff from various departments and programs within the Ministry to be involved in evaluating the programs and services within the MOH, including the Reproductive Health (RH), MCH, CSHCN, and Family Planning (FP). The MCH Program also collaborated with other stakeholders from the Ministry of Education, Special Education, School Health, the Ministry of Internal Affairs, Parents' Organization, Youth-to-Youth-in-Health, Community Leaders, Women's Organization and the RMI Interagency Council.

During the past year, the Ministry has implemented the Fifteen Year Strategic Plan for 2001-2015 and the MOH Portfolio. During the period, the Secretary of Health and the senior staff from the Ministry conducted program evaluations on services provided by the Ministry. A Needs Assessment was also conducted to identify program areas of need. It was necessary to review all data and statistics to evaluate how the services are implemented based on the statistics and program presented.

During the year, the process of reviewing data and assessing the programs and services within the Ministry was conducted. The Office of Health Planning and Statistics continued to provide data on all RH/MCH programs and services for the senior staff to review. The Ministry used the documents listed below during the process of the needs assessment in order to evaluate the MCH program services.

Form 14 for Year 2005

1. To continue to reduce infant mortality rates.
2. To reduce the rates of teen pregnancy.
3. To increase rates of prenatal visits during the first half of pregnancy (up to 5 months of pregnancy); to increase the rate of prenatal during the first trimester (first 3 months) of pregnancy.
4. To reduce the rates of neonatal mortality and morbidity; to reduce the infant mortality rates.

5. To increase access to preventive services for women who are at risk for cancer.
6. To reduce the rates of sexually transmitted diseases among women of child-bearing age.
7. To strengthen the Health Information System to provide essential data to strengthen health care services focusing on preventive services. (Discontinued as actual data is not easily available.)
8. To improve accessibility to the MCH/CSHCN services for children 0-21 years and their families.
9. To improve preventive services for school children in dental services, immunization and nutrition education; to improve preventive services for school children in dental care.
10. To develop and implement newborn hearing screening.

Form 14 for Year 2010 State Priority Needs

1. To reduce the rates of sexually transmitted diseases among women of child bearing age.
2. To reduce the maternal mortality rate.
3. To reduce the infant mortality rate.
4. To increase the percentage of teenage (15-17 years old) acceptors of modern contraception.
5. To increase the percentage of mothers who breastfeed their newborns at 12 months after delivery.
6. To increase the number of women who are screened for cervical cancer.
7. To increase the percentage of mothers who receive nutrition counseling during prenatal care.
8. To increase the percentage of mothers who access prenatal care in the first trimester of pregnancy.
9. To improve preventive services for school children in nutrition.
10. To Improve accessibility to the MCH/CSHCN services for children 0-21 and their families.

Priority Needs and Capacity

The MCH and CSHCN have been integrated into one program. This allows for more efficient use of scarce human resources and better collaboration and coordination of services in MCH. The RMI MCH/CSHCN program provides and coordinates the full spectrum of preventive and primary health care services for mothers, infants, children and adolescents both in the hospital settings and the health centers. The services include prenatal and high-risk prenatal care clinics, postpartum care, and well childcare that includes immunization, high-risk pediatric clinics, school health program, coordination of family planning services, and the coordination of care for CSHCN. The MCH/CSHCN has been placed organizationally within RH. This further allows for more efficient use of scarce human resources and better collaboration and coordination of services in MCH. For several years, one of the priorities of the MOH was to develop an effective health information system; this is now under development. The Ministry recently hired a health planner who will be an asset not only to the Ministry but also to the MCH/CSHCN Program. The Ministry has received technical assistance to modify its MOH

Integrated Information System (MHIIS) in order to improve its capabilities to collect and use data to improve health care services. The Ministry has established a MHIIS Committee and Work Group to review all forms and other documents that will enhance the MHIIS. All programs in the Ministry have already started using the revised forms for recording and reporting of data which are being collected and channeled to the Office of Health Planning and Statistics. Staff training on the use of the revised forms is completed.

In addition to the encounter forms used by health facilities in the urban centers, a monthly form was developed to ensure that reports are regularly submitted to the Office of Outer Islands as under reported by agencies within the Government due to inadequacy of reports submitted from the health centers. Therefore, mechanisms have been developed to improve the reporting of the number of births, deaths and encounters for all clinical and preventive services provided in the outer atolls.

The MOH and donor agencies fund the continuing education and training of public health staff. The assistant secretary or program directors assignment the personnel who attend training program. The training has been in various formats like workshops, seminars, and certificate or academic programs.

Monitoring and evaluation duties will be assigned to the individual program managers and directors and to the Bureau of Health Planning and Statistics. In the process of monitoring and evaluating the implementation of activities for the grant, the MHIIS is being tailored to address the needs of a database that will be flexible to collect epidemiological data that can be used as a tool for investigations and policy making decisions. These measures were selected to assist the Secretary of Health, Assistant Secretaries, department managers, program coordinators, and the Health Planning and Statistics Bureau in developing contingency, staffing, and organizational plans to ensure that the MOH will have the means to collect and analyze data for tracking the National and Jurisdictional Performance Measures.

MCH Population Groups Assurance for Coverage:

There are nine nurses in Reproductive Health that implement all the clinical and primary care programs. These nurses travel to the outer islands in addition to supervising their assigned health zone in Majuro and Ebeye, Kwajalein. These nurses also have assigned work on weekends to provide Reproductive Health services, such as MCH and CSHCNs in the two expanded clinics, one at the Youth-to-Youth-In-Health and one at the Laura Health Center located at the end of the island. The same nurses provide the program service delivery to the MCH population throughout the Republic.

There are two nurses, one obstetrician-gynecologist , one Health Educator, one Mental Health Counselor, and one Dental Assistant being paid out from the MCH Block Grant. Aside from the nurses working in RH, the program is collaborating with other programs like the Immunization Program, Well Baby Clinic, Laboratory staff, Radiology, pediatricians, health assistants, mental

health, Health Promotion and Disease Prevention Unit, health planning and statistics office and other public health programs. In providing the necessary required data needed for the completion of the grant, the program collaborated with the OHPS and the EPPSO. through the IT Director of OHPS.

The MOH, is the only "state" agency that provides health care services in the Republic, and realizes the significance of collaborating with other agencies in the implementation of services to the communities. The MCH/CSHCN Program is one of the components in RH within Public Health, and services are effectively coordinated among the staff in Public Health.. The MCH/CSHCN services also coordinate with other divisions in the Bureau of Primary Health Care, such as the Mental Health, Alcohol & Substance Abuse Prevention, and Social Worker programs. For community outreach purposes, the MCH/CDSHCN coordinate with Health Education and Promotion Program and the Family Planning Program.

TMCH/CSHCN and Family Planning Programs have integrated into one service called the RH Program, for better management and improved utilization of services. The RH Program has expanded its services to 16 delivery sites with two additional clinics sites on Majuro. Laura Health Center and Youth-to-Youth Inc. The MCH/CSHCN services also coordinate and collaborate between other programs within the Ministry of Health, other government agencies, such as Ministry of Education, Ministry of Internal Affairs, and NGOs, such as Youth programs, Women's Organizations.

The MOH Core Committee (KUMITI) carries out coordination of community awareness on primary health activities and programs. The Committee consists of department heads in the MOH. All the international and national health events are coordinated by the Ministry's Core Committee in collaboration with the RMI Inter-Agency Council and the National Population Coordinating Committee. The MCH/CSHCN coordinator is also a member of the Inter-Agency Leadership Council which coordinates with all agencies that provide services for CSHCN. Through a Memorandum-of-understanding, the members of the Inter-Agency coordinate services for all CSHCN and adults who have special needs. The members of the Inter-Agency Council include: Special Education Program in the Ministry of Education, Health Start Program, College of Marshall Islands, Majuro Atoll Local Government, Kwajalein Atoll Local Government, Women in Development Office in the Ministry of Internal Affairs, and the programs in the Ministry of Health such as the Mental Health Program, Vocational Rehabilitation and Social Work.

The Laura Health Center is on regular staff receiving salary from the MCH Block Grant. While on a regular weekly basis, one OBGYN or CNM, and one RH Nurse join the health assistant and full RH service is being provided, such as Prenatal Clinic, women/male health clinic, FP and other RH services. The Youth to Youth In Health clinics are being held three times a week to provide RH/MCH services for the youth up the 25 years of age.

Priority Needs and State Performance Measures:

The RMI State Priorities have been divided according to the MCH population. The tables below detail the breakdown. Following the priority statements are statement of objectives and strategies for each priority.

1. **Pregnant Women, Mothers and Infants**

2010-2014
1. To reduce the infant mortality rate
2. To reduce the maternal mortality rate
3. To increase the percentage of mothers who breastfeed their newborns at 12 months after delivery.
4. To reduce the rates of sexually transmitted diseases among women of child bearing age
5. To increase the number of women who are screened for cervical cancer
6. To increase the percentage of mothers who receive nutrition counseling during prenatal care.
7. To increase the percentage of mothers who access prenatal care in the first trimester of pregnancy

- 1. To reduce the infant mortality rate (IMR). (Continued)

  The IMR remains high. Prematurity is one of the causes of infant mortality which is linked to the health of the mother. A higher priority should be placed on prenatal care for pregnant women.

  Obj.1.1 By September 2012, all pregnant women in prenatal clinic will be screened for Chlamydia.

  Obj.1.2 By September 2012, all pregnant women will receive nutritional education from a certified nutritionist.

  Obj.1.3 By October 2011, a high risk pregnant women clinic protocols will be reviewed and updated as necessary.

- 2. To reduce the maternal mortality rate. (New)

  In the last five years, the RMI has had maternal deaths which were preventable. Priority will be placed on improving the health care of pregnant women to avoid maternal death. Detection of high risk pregnancy will be increased.

  Obj. 2.1 By September 2011, all MCH clinical staff will have been trained on high risk pregnancy management.

  Ob. 2.2 By January 2012, all high risk pregnant women will have been enrolled in the High Risk clinic and managed appropriately

- 3. To increase the percentage of mothers who breastfeed their newborns at 12 months after delivery. (Continued)

  The focus is for the mothers to know about the importance of breast milk to increase their awareness and value of breastfeeding on the health of their infant.

  Obj. 3.1 By October 2011, all postpartum mothers will be provided breastfeeding education before hospital discharge.

  Obj. 3.2 By October 2011, all pregnant women who attend prenatal clinic will be provided breastfeeding education and counseling during the last trimester.

- 4. To reduce the rates of sexually transmitted diseases among women of child bearing age. (Continued)

  The RMI's STD rate is high. This priority will be continued. It is a priority to reduce the rates through detection, promotion and awareness, and availability of protection.

  Obj. 4.1 By January 2012 all family planning users will be screened for STD at each clinic visit.

- 5. To increase the number of women who are screened for cervical cancer. (Continued)

  Cervical cancer is the most common cancer for women in the RMI. The RMI will strive to increase the number of women who get screened on schedule in order to detect abnormalities as early as possible and to promote cervical cancer prevention and awareness.

  Obj. 5.1 By January 2012 all high risk family planning users will be screened for Cervical cancer at each clinic visit.

  Obj. 5.2 By October 2011, the MCH Program will provide quarterly public education on cervical cancer and STD

- 6. To increase the percentage of mothers who access prenatal care in the first trimester of pregnancy. (Continued)

  The outcome of pregnant women entering care during their trimester is really low. Pregnant women should enter prenatal care in their first trimester in order to receive assessment early to avoid high risks and birth complications.

  Obj. 6.1 By October 2011, the MCH Program will create quarterly radio spots and newspaper clippings for mass education.

- 7. To increase the percentage of mothers who receive nutrition counseling during prenatal care. (Continued)

  Obj. 7.1 By October 2011, all pregnant women in the prenatal clinic will be educated and counseled on nutrition.

2. Children and Adolescents

2010 - 2014
8. To increase the percentage of teenage (15-17 years old) acceptors of modern contraception
9. To improve preventive services for school children in nutrition.

- 8. To increase percentage of teenage (15-17 years old) acceptors of modern contraception. (New)

  One way to decrease teenage pregnancy is to increase the percentage of teen acceptors. Family planning services will be promoted to teenagers. Youth to Youth, an NGO for young people will be tapped to improve this priority.

  Obj. 8.1 By October 2011, the MCH Program will provide assistance to YTY to collect/analyze information on reproductive health as part of their data gathering when they provide peer counseling to young people.

- 9. To improve preventive services for school children in nutrition. (New)

  The MCH program will continue activities for providing services to school children. There is a problem with obesity in early age which is a priority.

  Obj. 9.1 By October 2011, the MCH Program will provide assistance to the NCD Program so they can include BMI monitoring in their school health activities.

3. Children with Special Health Care Needs

2010 - 2014
1. To improve accessibility to the MCH/CSHCN services for children 0-21 and their families.

- 10. To improve accessibility to the MCH/CSHCN services for children 0-21 and their families. (Continued)
  - Obj. 10.1 By October 2011, direct service care for children with special needs are provided to all CSN who may require care.
  - Obj. 10.2 By January 2012, the CHSCN Database will have been updated to show appropriate case load.
  - Obj. 10.3 By January 2012l, a SLAITS-like survey will have been implemented to enable RMI MCH Program to respond to the NP on CSHCN.

2010 State Performance Measures

1. To reduce the rates of sexually transmitted diseases among women of child bearing age.
2. To reduce maternal mortality rate.
3. To reduce infant mortality rate.
4. Percentage of teenage (15-17 years old) acceptors of modern contraception.
5. Percentage of mothers who breastfeed their newborns at hospital discharge.
6. Percentage of mothers who receive nutrition and family planning counseling during prenatal care.
7. The number of women who are screened for cervical cancer.
8. Proportion of children who are identified and referred to the CSHCN program.

Linkage of Priorities with National and State Performance Measures

Pregnant Women, Mothers and Infants

State Priorities	State/National
To reduce the infant mortality rate	NOM-01; SPM-03
To reduce the maternal mortality rate	SPM-02
To increase percentage of mothers who breastfeed their newborns at 12 months after delivery	NPM-11; SPM-05
To reduce the rates of sexually transmitted diseases among women of child bearing age	SPM-01
To increase the number of women who are screened for cervical cancer	SPM-07
To increase the percentage of mothers who receive nutrition counseling during prenatal care	SPM-06
To increase the percentage of mothers who access prenatal care in the first trimester of pregnancy	NPM-18

Children and Adolescents

2010	State/National Performance
To increase the percentage of teenage (15-17 years old) acceptors of modern contraception	NPM-08; SPM-04
To improve preventive services for school children in nutrition	

CSHCN

2010	State/National Performance
To improve accessibility to the MCH/CSHCN services for children 0-21 and their families.	NPM-01; NPM-02; NPM-03; NPM-04; NPM-05; SPM-08

Outcome Measures - Federal and State

For the next five years, MOH will focus on ways to improve the services and programs for the MCH population groups and also to focus on the recommendations provided. The RMI MCH Program plans are linked to the National and State Performance Measures to secure progress of healthier outcomes for the MCH population. Partnerships have been established with internal and external agencies to expand and support MCH activities. The MCH population has been served with all available resources. The efforts of the MCH program to improve the health status of the MCH population have been successful and it is imperative that the MCH program's development and implementation continue.