MINISTRY OF HEALTH

HEALTH IN MYANMAR

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Guidelines related to Health Sector by H.E. General Thiha Thura Tin Aung Myint Oo, Secretary (1) of the State Peace and Development Council Chairman of the National Health Committee

- Healthy and educated people are the primary human resources when the State is developing all sectors aiming towards a peaceful, modernized and developed nation.
- The uplifting of the health status of the people will enable to uplift the social and economic status of each and every citizen leading towards the peace and development of the country.
- Prepare health facilities to be protected from emergencies and be ready to respond and save lives.
- Carry out the emergency preparedness activities in parallel with other health development activities.

Foreword by H.E. Professor Dr. Kyaw Myint, Minister for Health

Myanmar health system like every health system in the world is trying to improve the health status and prolong the lives of its citizens. In fact health care system is only one component of the factors determining health. Human health is determined not only by contact with the microbes and toxins that directly cause illness or by organ system failures, but also by other biological and social factors. Health is strongly influenced by socioeconomic factors, demographic trends and environmental factors. In this age of changing climatic and environmental conditions some negative consequences like disasters, natural or manmade, have taken the attention of global health leaders as more human health and lives have been damaged or endangered in the recent wake of earthquakes, cyclones and floods in some part of the world. There are evidences that countries responding effectively to unexpected disasters can resume activities far faster than those without mechanisms for risk reduction or preparedness. Investing in risk reduction measures constitutes a critical component of development. Disaster reduction should be a key element of national strategies for meeting the MDGs since it is integral to development.

The cyclone Nargis, the gravest natural disaster the country experienced in its history hit Myanmar in May 2008. Loss of lives and properties were devastating. Under the leadership of the Head of State and with collaborative and coordinated efforts of the international and national organizations, adequate health care could be provided for the victims and disease out breaks could be prevented. The emergency relief, rehabilitation and reconstruction tasks were smooth and successful. We were able to provide adequate health care for the disaster victims and prevent disease outbreaks. Funds provided by the government, donations by the people, cooperation of the local companies and relief aids of international organizations were instrumental in the rehabilitation process.

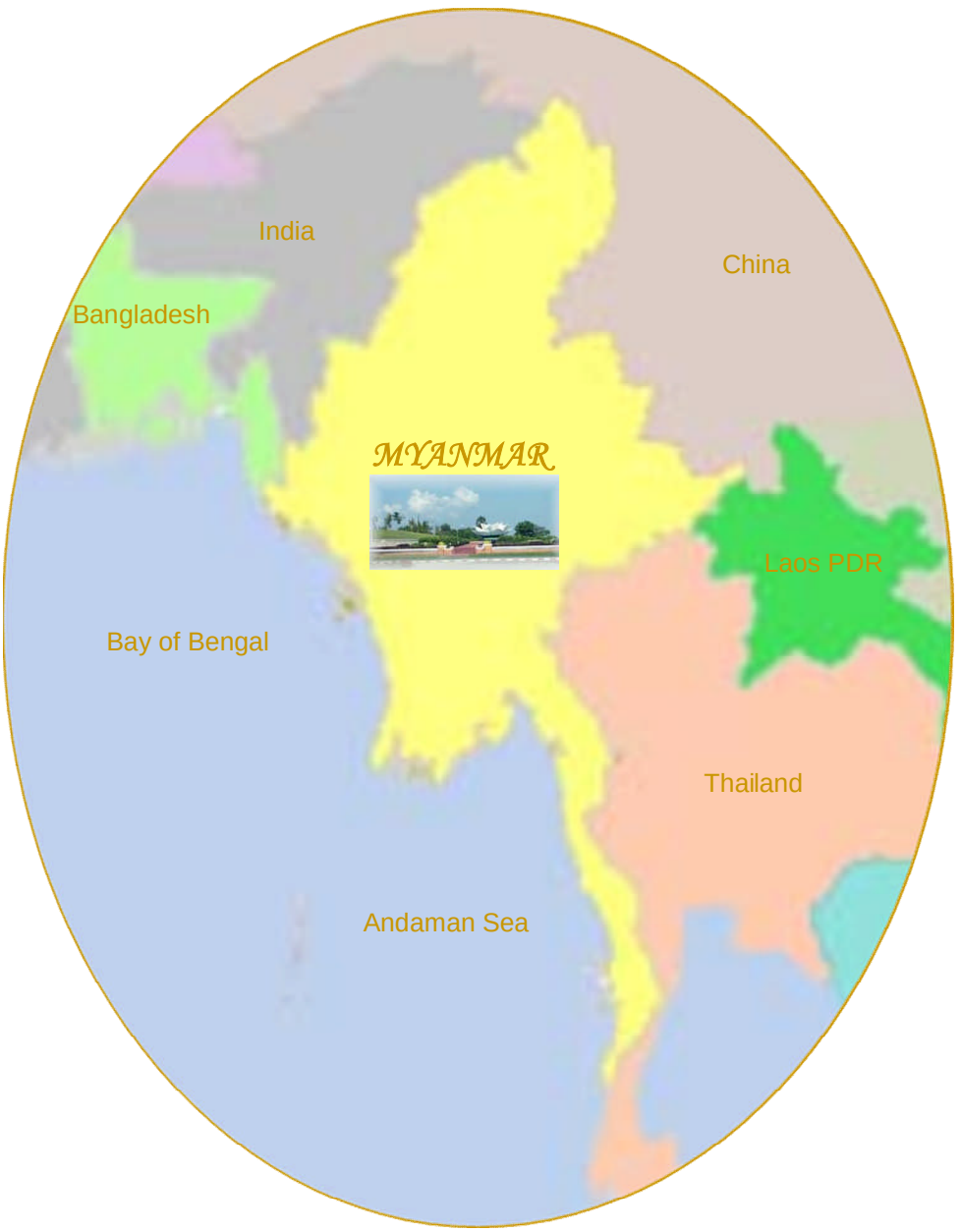
The event highlighted the fact that it is important to be prepared at national, provisional and community levels to reduce the risk when a national disaster occurs. As communities are usually the first affected in an emergency when life-lines and access to the rest of the world are often cut off they must be self reliant in responding.

One of the biggest challenges in disaster management is incorporating coordinated and efficient emergency preparedness and response mechanisms between different levels of health administrations. Effective disaster management plans require involvement of every level of administration, particularly townships and local communities. In order to respond appropriately and immediately to a disaster certain flexibility should be considered within plans for autonomous decision and resource allocation at various levels. Ensuring that communities are engaged in developing emergency preparedness and response efforts is a key issue.

In conformity with the National Health Policy and under the guidance of the State, we will keep on collaborating with partners both national and international, to be prepared and responsive to any emergency situations threatening and damaging health and lives of the people.

Professor Dr. Kyaw Myint
Minister for Health

COUNTRY PROFILE



Location

Myanmar, approximately the size of France and England combined, is the largest country in mainland South-East Asia with a total land area of 676,578 square kilometers. It stretches 2200 kilometers from north to south and 925 kilometers from east-west at its widest point. Lying between 09°32' N and 28°31'N latitudes and 92°10' E and 101°11' E longitudes, it is bounded on the north and north-east by the People's Republic of China, on the east and south-east by the Lao People's Democratic Republic and the Kingdom of Thailand, on the west and south by the Bay of Bengal and Andaman Sea, on the west by the People's Republic of Bangladesh and the Republic of India.

Geography

The country is divided administratively, into 14 States and Divisions. It consists of 66 districts, 325 townships, 60 subtownships, 2781 wards, 13714 village tracts and 64910 villages. Myanmar falls into three well marked natural divisions, the western hills, the central belt and the Shan plateau on the east, with a continuation of this high land in the Tanintharyi.

Three parallel chains of mountain ranges from north to south divide the country into three river systems, the Ayeyarwaddy, Sittaung and Thanlwin. Myanmar has abundant natural resources including land, water, forest, coal, mineral and marine resources, and natural gas and petroleum. Great diversity exists between the regions due to the rugged terrain in the hilly north which makes communication difficult. In the southern plains and swampy marshlands there are numerous rivers and tributaries criss-crossing the land in many places.

Climate

Myanmar enjoys a tropical climate with three distinct seasons, the rainy, the cold and the hot season. The rainy season comes with the southwest monsoon, lasting from mid-May to mid-October, followed by the cold season from mid-October to mid-February. The hot season preceeds rainy season and lasts from mid-February to mid-May.

During the 10 years period covering 1995-2004, the average rainfall in the Coastal regions of the Rakhine and Tanintharyi was ranging between 4000 mm and 5600 mm annually. The Ayeyarwady delta had a rainfall of about 3300 mm, the mountains in the extreme north had between 1800 mm and 2400 mm and the hills of the east between 1200 mm and 1400 mm. The dry zone had between 600 and 1400 mm due to the Rakhine Yomas (hills) cutting off the monsoon. The average temperature experienced in the delta ranged between 22°C to 32°C, while in the dry zone, it was between 20°C and 34°C. The temperature was between 16°C and 29°C in hilly regions and even lower in Chin state ranging between 10°C and 23°C.

Demography

The population of Myanmar in 2007-2008 is estimated at 57.504 million with the growth rate of 1.75 percent. About 70 percent of the population resides in the rural areas, whereas the remaining are urban dwellers.

The population density for the whole country is 85 per square kilometers and ranges from 595 per square kilometers in Yangon Division, where in lies the city of Yangon, to 14 per square kilometers in Chin State, the western part of the country.

Estimates of population and it's structure (1980-2007)

Population Structure (in million)	1980-81		1990-91		2000-01		2006-07		2007-08	
	Estimate	%	Estimate	%	Estimate	%	Estimate	%	Estimate	%
0-14 years	13.03	38.77	14.70	36.05	16.43	32.77	18.37	32.50	18.57	32.30
15-59 years	18.44	54.86	23.47	57.55	29.72	59.29	33.41	59.11	33.87	58.90
60 years and above	2.14	6.37	2.61	6.4	3.98	7.94	4.74	8.39	5.06	8.80
Total	33.61	100	40.78	100	50.13	100	56.52	100	57.50	100
Female	16.93	50.37	20.57	50.28	25.22	50.31	28.42	50.28	28.92	50.29
Male	16.68	49.63	20.21	49.72	24.91	49.69	28.10	49.72	28.58	49.71
Sex Ratio (M /100 F)	98.52		98.25		98.77		98.87		98.85	

Source: Planning Department, Ministry of National Planning and Economic Development

People and Religion

The Union of Myanmar is made up of 135 national groups speaking over 100 languages and dialects. The major ethnic groups are Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine and Shan. About 89.4% of the population mainly Bamar, Shan, Mon, Rakhine and some Kayin are Buddhists. The rest are Christians, Muslims, Hindus and Animists.

Economy

Myanmar is a country with a large land area rich in natural and human resources. Cognizant of the fact that the agricultural sector can contribute to overall economic growth of the country the government has accorded top priority to agricultural development as the base for all round development of the economy as well.

Following the adoption of market oriented economy from centralized economy the government has carried out liberal economic reforms to ensure participation of private sector in every sphere of economic activities.

Encouragement for the development of the industrial sector has been provided since 1995. In order to support and to render assistance to small and medium size industries scattered all over the countries in an organized manner, the government has established 19 industrial zones in states and divisions.

Social Development

Development of social sector has kept pace with economic development. Expansion of schools and institutes of higher education has been considerable especially in the States and Divisions. Adult literacy rate for the year 2005 was 94.1% while school enrolment rate was 97.58%, increasing respectively from 79.7% and 67.13% in 1988. Expenditure for health and education have risen considerably, equity and access to education and health and social services have been ensured all over the country.

With prevalence of tranquility, law and order in the border regions, social sector development can be expanded throughout the country. Twenty four special development regions have been designated in the whole country where health and education facilities are developed or upgraded along with other development activities. Some towns or villages in these regions have also been upgraded to sub-township level with development of infrastructure to ensure proper execution of administrative, economic and social functions.

Gross Domestic Product (kyats in million)

GDP	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07▲
Current	3548472.2	5625254.7	7716616.2	9078928.5	12286765.4	16715664.9
Constant Producers' Prices	2842314.4▲	3184117.3▲	3624926.4▲	4116635.4▲	4675219.6▲	13853030.4▲
Growth (%)	11.3	12.0	13.8	13.6	13.6	12.7

Source: Statistical Year Book 2007, CSO

▲ Provisional actual ▲ 2000-01 Constant Producers' Prices ▲ 2005-06 Constant Producers' Prices

MYANMAR HEALTH CARE SYSTEM

Myanmar health care system evolves with changing political and administrative system and relative roles played by the key providers are also changing although the Ministry of Health remains the major provider of comprehensive health care. It has a pluralistic mix of public and private system both in the financing and provision. Health care is organized and provided both by public and private providers.

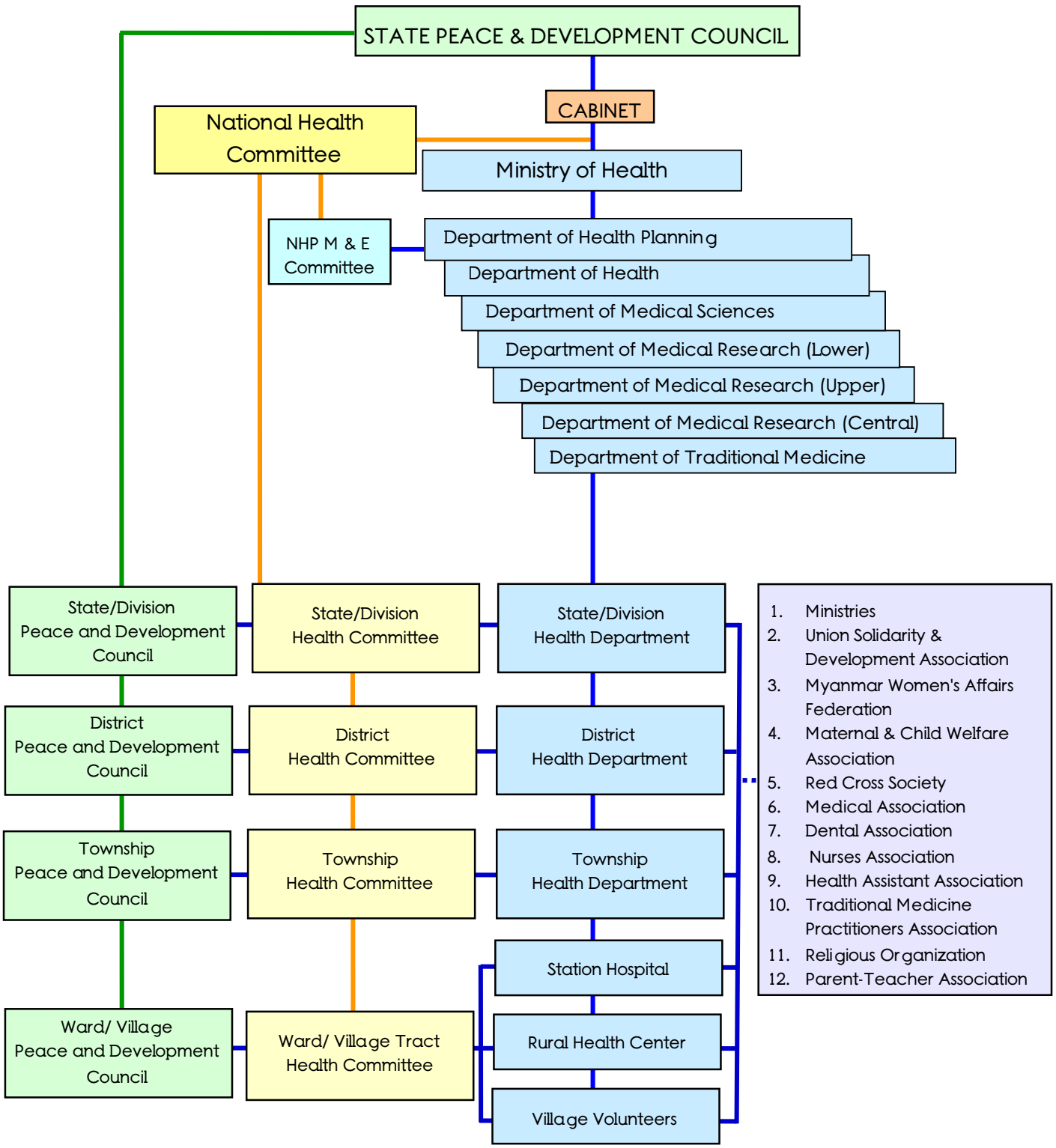
Ministry of Health is the main organization of health care provision. Department of Health, one of 7 departments under the Ministry of Health, plays a major role in providing comprehensive health care through out the country including remote and hard to reach border areas. Some ministries are also providing health care, mainly curative, for their employees and their families. They include Ministries of Defense, Railways, Mines, Industry I, Industry II, Energy, Home and Transport. Ministry of Labour has set up two general hospitals, one in Yangon and the other in Mandalay, and one TB hospital in Hlaingtharyar (Yangon) to render services to those entitled under the social security scheme. Ministry of Industry (1) is running a Myanmar Pharmaceutical Factory and producing medicines and therapeutic agents to meet the domestic needs.

The private, for profit, sector is mainly providing ambulatory care though some providing institutional care has developed in Yangon, Mandalay and some large cities in recent years. Funding and provision of care is fragmented. They are regulated in conformity with the provisions of the law relating to Private Health Care Services. General Practitioners' Section of the Myanmar Medical Association with its branches in townships provide the private practitioners the opportunities to update and exchange their knowledge and experiences by holding seminars, talks and symposia on currently emerging issues and updated diagnostic and therapeutic measures. The Medical Association and its branches also provide a link between them and their counterparts in public sector so that private practitioners can also participate in public health care activities.

One unique and important feature of Myanmar health system is the existence of traditional medicine along with allopathic medicine. Traditional medicine has been in existence since time immemorial and except for its waning period during colonial administration, when allopathic medical practices had been introduced and flourishing, it is well accepted and utilized by the people through out the history. With encouragement of the State scientific ways of assessing the efficacy of therapeutic agents, nurturing of famous and rare medicinal plants, exploring, sustaining and propagation of treatises and practices can be accomplished. There are a total of 14 traditional hospitals run by the State in the country. Traditional medical practitioners have been trained at an Institute of Traditional Medicine and with the establishment of a new University of Traditional Medicine conferring a bachelor degree more competent practitioners can now be trained and utilized. There are quite a number of private traditional practitioners and they are licensed and regulated in accordance with the provisions of related laws.

In line with the National Health Policy NGOs such as Myanmar Maternal and Child Welfare Association, Myanmar Red Cross Society are also taking some share of service provision and their roles are also becoming important as the needs for collaboration in health become more prominent. Sectoral collaboration and community participation is strong in Myanmar health system thanks to the establishment of the National Health Committee in 1989. Recognizing the growing importance of the needs to involve all relevant sectors at all administrative levels and to mobilize the community more effectively in health activities health committees have been established in various administrative levels down to the wards and village tracts. These committees at each level are headed by the chairman or responsible person of the organs of power concern and include heads of related government departments and representatives from the social organizations as members. Heads of the health departments are designated as secretaries of the committees.

Health Service Delivery System

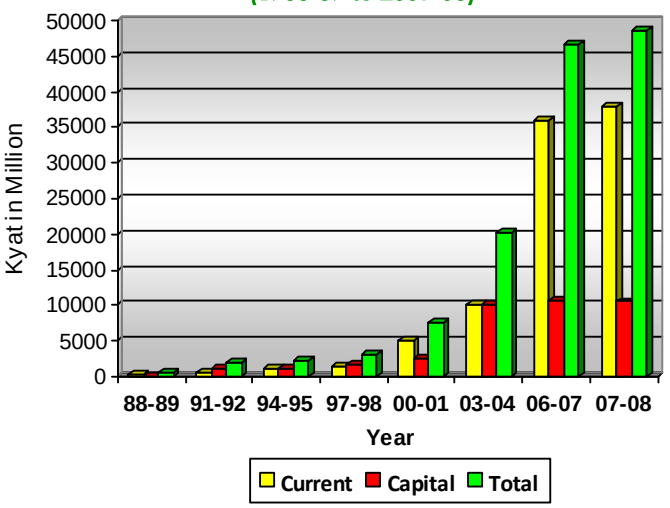


Financing Health

The major sources of finance for health are the government and the private households.

Government has increased health spending on both current and capital yearly. Total government health expenditure increased from kyats 464.1million in 1988-89 to kyats 48489.6 million in 2007-2008.

Government Health Expenditure
(1988-89 to 2007-08)



Governmental Health Expenditures by Functions (1998-2001)

Million Kyats

Functions (%)	1998	1999	2000	2001
Services of Curative & Rehabilitative Care	698.409 (22.34)	1001.226 (23.17)	2581.648 (33.58)	2724.353 (29.57)
Ancillary Services to Medical Care	6.186 (0.2)	5.389 (0.12)	14.448 (0.19)	15.519 (0.17)
Medical Goods Dispensed to Patients	315.665 (10.09)	377.609 (8.74)	427.884 (5.57)	596.272 (6.47)
Prevention & Public Health Services	240.506 (7.69)	266.536 (6.17)	860.502 (11.19)	870.536 (9.45)
Health Administration & Insurance	120.975 (3.87)	222.859 (5.16)	379.103 (4.93)	346.196 (3.76)
Not Specified in Kind	357.072 (11.42)	368.399 (8.52)	578.167 (7.52)	777.898 (8.44)
Health Related Functions*	1388.087 (44.39)	2079.382 (48.12)	2846.448 (37.02)	3881.726 (42.14)
Total Health Expenditure	3126.9 (100)	4321.4 (100)	7688.2 (100)	9212.5 (100)

**Health related functions include training and production of human resources for health and health research.*

Social Health Insurance

Social security scheme was implemented in accordance with 1954 Social Security Act by the Ministry of Labour. According to the law factories, workshops and enterprises that have over 5 employees whether State owned, private, foreign or joint ventures, must provide the employees with social security coverage. The contribution is tri-partite with 2.5% by the employer 1.5% by the employee of the designated rate while the government contribution is in the form of capital investment. Insured workers under the scheme are provided free medical treatment, cash benefits and occupational injury benefit. One 250-bedded Workers' Hospital in Yangon, one 150-bedded Workers' Hospital in Mandalay and one 100-bedded TB Hospital in Hlaingtharyar has been established along with 89 dispensaries and 2 mobile medical units.

HEALTH POLICY, PLANS AND LEGISLATION

Chairman of the State Peace and Development Council,
Senior General Than Shwe inspecting the provision of Health Care at
the areas affected by Cyclone Nargis affected area and giving guidance

Vice Chairman of the State Peace and Development Council,
Vice Senior General Maung Aye inspecting the Health Clinics at
areas affected by Cyclone Nargis affected area and providing necessary instructions

National Health Committee (NHC)

The National Health Committee (NHC) was formed on 28 December 1989 as part of the policy reforms. It is a high level inter-ministerial and policy making body concerning health matters. The National Health Committee takes the leadership role and gives guidance in implementing the health programmes systematically and efficiently. The high level policy making body is instrumental in providing the mechanism for intersectoral collaboration and co-ordination. It also provides guidance and direction for all health activities. Under the guidance of the National Health Committee various health committees had been formed at each administrative level.

For the monitoring and evaluation purpose, National Health Plan Monitoring and Evaluation Committee has been formed at the central level. Built-in monitoring and evaluation process is undertaken at State/Division and Township level on regular basis. Implementation of National Health Plan at various levels is carried out in collaboration and co-operation with health related sectors and NGOs.

Composition of National Health Committee

1.	Secretary (1), State Peace and Development Council	Chairman
2.	Minister, Ministry of Health	Member
3.	Minister, Ministry of National Planning and Economic Development	Member
4.	Minister, Ministry of Home Affairs	Member
5.	Minister, Ministry for Progress of Border Areas and National Races and Development Affairs	Member
6.	Minister, Ministry of Social Welfare, Relief and Resettlement	Member
7.	Minister, Ministry of Science and Technology	Member
8.	Minister, Ministry of Education	Member
9.	Minister, Ministry of Sports	Member
10.	Minister, Ministry of Immigration and Population	Member
11.	Mayor, Nay Pyi Taw	Member
12.	Director, Directorate of Medical Services, Ministry of Defence	Member
13.	Deputy Minister, Ministry of Health	Secretary
14.	Director General, Department of Health Planning, Ministry of Health	Joint Secretary

National Health Policy

The National Health Policy was developed with the initiation and guidance of the National Health Committee in 1993. The National Health Policy has placed the Health For All goal as a prime objective using Primary Health Care approach. The National Health Policy is designated as follows:

1.	To raise the level of health of the country and promote the physical and mental well-being of the people with the objective of achieving "Health for all" goal, using primary health care approach.
2.	To follow the guidelines of the population policy formulated in the country.
3.	To produce sufficient as well as efficient human resources for health locally in the context of broad frame work of long term health development plan.
4.	To strictly abide by the rules and regulations mentioned in the drug laws and by-laws which are promulgated in the country.
5.	To augment the role of co-operative, joint ventures, private sectors and non-governmental organizations in delivering of health care in view of the changing economic system.
6.	To explore and develop alternative health care financing system.
7.	To implement health activities in close collaboration and also in an integrated manner with related ministries.
8.	To promulgate new rules and regulations in accord with the prevailing health and health related conditions as and when necessary.
9.	To intensify and expand environmental health activities including prevention and control of air and water pollution.
10.	To promote national physical fitness through the expansion of sports and physical education activities by encouraging community participation, supporting outstanding athletes and reviving traditional sports.
11.	To encourage conduct of medical research activities not only on prevailing health problems but also giving due attention in conducting health system research.
12.	To expand the health service activities not only to rural but also to border areas so as to meet overall health needs of the country.
13.	To foresee any emerging health problem that poses a threat to the health and well-being of the people of Myanmar, so that preventive and curative measures can be initiated.
14.	To reinforce the services and research activities of indigenous medicine to international level and to involve in community health care activities.
15.	To strengthen collaboration with other countries for national health development.

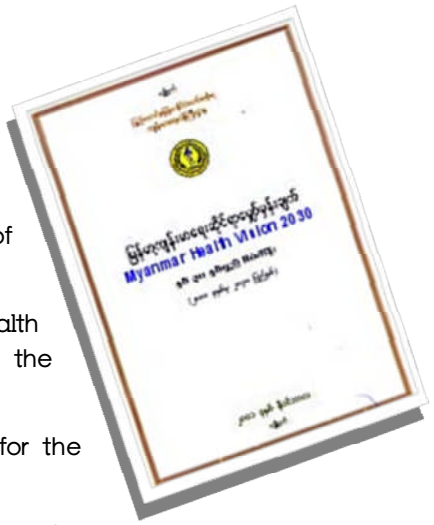
Health Development Plans

With the objective of uplifting the health status of the entire nation, the Ministry of Health is systematically developing Health Plans, aiming towards Health for All Goal. From 1978 onwards four yearly People's Health Plans have been drawn up and implemented. Since 1991, short term National Health Plans have been developed and implemented.

Myanmar Health Vision 2030

Considering the rapid changes in demographic, epidemiological and economic trends both nationally and globally, a long-term (30 years) health development plan has been drawn up to meet any future health challenges. The plan is developed within the broad framework of the national objectives i.e. political, economic and social objectives of the country. This long term visionary plan with its objectives will be a guide on which further short-term national health plans are to be developed.

Objectives



- To uplift the Health Status of the people.
- To make communicable diseases no longer public health problems, aiming towards total eradication or elimination and also to reduce the magnitude of other health problems.
- To foresee emerging diseases and potential health problems and make necessary arrangements for the control.
- To ensure universal coverage of health services for the entire nation.
- To train and produce all categories of human resources for health within the country.
- To modernize Myanmar Traditional Medicine and to encourage more extensive utilization.
- To develop Medical Research and Health Research up to the international standard.
- To ensure availability in sufficient quantity of quality essential medicine and traditional medicine within the country.
- To develop a health system in keeping with changing political, economic, social and environmental situation and changing technology.

Main components of the Plan

- Health Policy and Law
- Health Promotion
- Health Service Provision
- Development of Human Resources for Health
- Promotion of Traditional Medicine
- Development of Health Research
- Role of Co-operative, Joint Ventures, Private Sectors and NGOs
- Partnership for Health System Development
- International Co-operation

Expected Benefits

Improvement in the following indicators:

Indicator	Existing (2001-2002)	2011	2021	2031
Life expectancy at birth	60 – 64	-	-	75 – 80
Infant Mortality Rate/1000 LB	59.7	40	30	22
Under five Mortality Rate/1000 LB	77.77	52	39	29
Maternal Mortality Ratio/1000 LB	2.55	1.7	1.3	0.9

National Health Plan (2006-2011)

The National Health Plan forms an integral part of the National Development Plan and is in tandem with the national economic development plan. The plan will ensure effective implementation of the National Health Policy. It covers the second 5 year period of Myanmar Health Vision 2030. Country's health problems were identified and priority diseases and health conditions were identified and ranked while the National Health Plan (2006-2011) was formulated.

Country's Health Problems

- Need for improvement in rural health care coverage and public health services
- Persistence of disease burden
- Persistence of maternal, infant and child mortality that needs further reduction
- Need of financial mechanism that ensures adequacy, equity and efficiency
- Requirement of systematic plan for human resources for health
- Need for strengthening organization and management of health services
- Under-utilization of health research
- Need of quality data for National Health Information System

Priority Ranking of Identified Diseases and Heath Conditions

Disease/ Health Condition	Rank
Acquired Immune Deficiency Syndrome	1
Malaria	2
Tuberculosis	3
Diarrhoea/Dysentery	4
Cholera	5
Avian Influenza	6
Dengue Haemorrhagic Fever	7
Vaccine Preventable Diseases	8
Protein Energy Malnutrition	9
Postpartum and Ante-partum Haemorrhage	10
Drug Abuse	11
PET and Hypertensive Disorder Pregnancy	12
Leprosy	13
Sexually Transmitted Infections	14
Disasters	15
Anaemia	16
Other Complications of Pregnancy, Child Birth & Puerperium	17
Cardiovascular Diseases	18
Acute Respiratory Tract Infections	19
Accidents and Injuries	20
Abortion	21

Disease/ Health Condition	Rank
Cancer	22
Viral Hepatitis	23
Diabetes Mellitus	24
Worm Infestations	25
Iodine Deficiency Disorders	26
Beri-beri	27
Snake bites	28
Occupational Diseases	29
Tetanus	30
Mental Illness	31
Eye Diseases	32
Enteric Fever	33
Oral Diseases	34
Handicap	35
Meningitis	36
Plague	37
Filariasis	38
ENT Diseases	39
Poisoning	40
Rabies	41
Leptospirosis	42

In ranking priority diseases in the National Health Plan 1993-1996 three diseases Malaria, Tuberculosis and AIDS topped the priority list in that order. In the current national health plan the same diseases are included again as top three priority diseases in the ranked order of AIDS, Malaria and Tuberculosis. AIDS is ranked as the first priority disease because of being accorded highest score on the basis of public health importance and political importance imparted to it and also on the consideration of potential socio-economic impact consequent to it. In terms of disease burden it is observed that malaria and tuberculosis gained higher score than AIDS. Over all AIDS is ranked as the first priority disease because of the higher score, it attained on public health, political and socio-economic perspective.

Objectives of the National Health Plan (2006-2011)

- To facilitate the successful implementation of the social objective, "uplift of health, fitness and educational standards of the entire nation"
- To implement the National Health Policy
- To strive for the development of a health system, that will be in conformity with political, economic and social evolutions in the country as well as global changes
- To enhance the quality of health care and coverage
- To accelerate rural health development activities

Main Components of the Plan

- Community Health Care
- Disease Control
- Hospital Care
- Environmental Health
- Health System Development
- Human Resources for Health
- Health Research
- Traditional Medicine
- Food and Drug Administration
- Laboratory Service
- Health Promotion
- Health Information System

Expected Benefits

National Health Plan 2006-2011 have been formulated within the objective frame of the second five year period of Myanmar Health Vision 2030 and as such is a short term plan to accelerate endeavours to realize the vision of raising the health status of the nation. The plan will carry on the tasks in the previous National Health Plan that still need to be completed and will also be implemented setting sights on reaching health related goals in the Millennium Declaration. In this way the plan will give effect to all round development of the country through raising the health status and will also enable the country as member of the global community to fulfill its roles and responsibilities in the international and regional agenda for health development.

Health Legislation

Legal provision for the interest of health of the people is accomplished through enacting the following health related laws.

1. Public Health Law (1972)	It is concerned with protection of people's health by controlling the quality and cleanliness of food, drugs, environmental sanitation, epidemic diseases and regulation of private clinics.
2. Dental and Oral Medicine Council Law (1989)	Provides basis for licensing and regulation in relation to practices of dental and oral medicine. Describes structure, duties and powers of oral medical council in dealing with regulatory measures.
3. Law relating to the Nurse and Midwife (1990)	Provides basis for registration, licensing and regulation of nursing and midwifery practices and describes organization, duties and powers of the nurse and midwife council.
4. Myanmar Maternal and Child Welfare Association Law (1990)	Describes structure, objectives, membership and formation, duties and powers of Central Council and its Executive Committee.
5. National Drug Law (1992)	Enacted to ensure access by the people safe and efficacious drugs. Describes requirement for licensing in relation to manufacturing, storage, distribution and sale of drugs. It also includes provisions on formation and authorization of Myanmar Food and Drug Board of Authority.
6. Narcotic Drugs and Psychotropic Substances Law (1993)	Related to control of drug abuse and describes measures to be taken against those breaking the law. Enacted to prevent danger of narcotic and psychotropic substances and to implement the provisions of United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Other objectives are to cooperate with state parties to the United Nations Convention, international and regional organizations in respect to the prevention of the danger of narcotic drugs and psychotropic substances. According to that law Central Committee for Drug Abuse Control (CCADC), Working Committees, Sectors and Regional Committees were formed to carry out the designated tasks in accordance with provisions of the law. The law also describes procedures relating to registration, medication and deregistration of drug users.

7. Prevention and Control of Communicable Diseases Law (1995)	Describes functions and responsibilities of health personnel and citizens in relation to prevention and control of communicable diseases. It also describes measures to be taken in relation to environmental sanitation, reporting and control of outbreaks of epidemics and penalties for those failing to comply. The law also authorizes the Ministry of Health to issue rules and procedures when necessary with approval of the government.
8. Eye Donation Law (1996)	Enacted to give extensive treatment to persons suffering from eye diseases who may regain sight by corneal transplantation. Describes establishment of National Eye Bank Committee and its functions and duties, and measures to be taken in the process of donation and transplantation.
9. Traditional Drug Law (1996)	Concerned with labeling, licensing and advertisement of traditional drugs to promote traditional medicine and drugs. It also aims to enable public to consume genuine quality, safe and efficacious drugs. The law also deals with registration and control of traditional drugs and formation of Board of Authority and its functions.
10. National Food Law (1997)	Enacted to enable public to consume food of genuine quality, free from danger, to prevent public from consuming food that may cause danger or are injurious to health, to supervise production of controlled food systematically and to control and regulate the production, import, export, storage, distribution and sale of food systematically. The law also describes formation of Board of Authority and its functions and duties.
11. Myanmar Medical Council Law (2000)	Enacted to enable public to enjoy qualified and effective health care assistance, to maintain and upgrade the qualification and standard of the health care assistance of medical practitioner, to enable studying and learning of the medical science of a high standard abreast of the times, to enable a continuous study of the development of the medical practitioners, to maintain and promote the dignity of the practitioners, to supervise the abiding and observing in conformity with the moral conduct and ethics of the medical practitioners. The law describes the formation, duties and powers of the Myanmar Medical Council and the rights of the members and that of executive committee, registration certificate of medical practitioners, medical practitioner license, duties and rights of registered medical practitioners and the medical practitioner license holders.

12. Traditional Medicine Council Law (2000)	Enacted to protect public health by applying any type of traditional medicine by the traditional medical practitioners collectively, to supervise traditional medical practitioners for causing abidance by their rules of conduct and discipline, to carry out modernization of traditional medicine in conformity with scientific method, to cooperate with the relevant government departments, organizations and international organization of traditional medicine. The law describes formation, duties and powers of the traditional medical council, registration as the traditional medical practitioners and duties and registration of the traditional medical practitioners.
13. Blood and Blood Products Law (2003)	Enacted to ensure availability of safe blood and blood products by the public. Describes measures to be taken in the process of collection and administration of blood and blood products and designation and authorization of personnel to oversee and undertake these procedures.
14. Body Organ Donation Law (2004)	Enacted to enable saving the life of the person who is required to undergo body organ transplant by application of body organ transplant extensively, to cause rehabilitation of disabled persons due to dysfunction of body organ through body organ donors, to enable to carry out research and educational measures relating to body organ transplant and to enable to increase the numbers of body organ donors and to cooperate and obtain assistance from government departments and organizations, international organizations, local and international NGOs and individuals in body organ transplant.
15. The Control of Smoking and Consumption of Tobacco Product Law (2006)	Enacted to convince the public that smoking and consumption of tobacco product can adversely affect health, to make them refrain from the use, to protect the public by creating tobacco smoke free environment, to make the public, including children and youth, lead a healthy life style by preventing them from smoking and consuming tobacco product, to raise the health status of the people through control of smoking and consumption of tobacco product and to implement measures in conformity with the international convention ratified to control smoking and consumption of tobacco product.

16. The Law Relating to Private Health Care Services (2007)	Enacted to develop private health care services in accordance with the national health policy, to enable private health care services to be carried out systematically as and integrated part in the national health care system, to enable utilizing the resources of private sector in providing health care to the public effectively, to provide choice of health care provider for the public by establishing public health care services and to ensure quality services are provided at fair cost with assurance of responsibility.

HEALTH INFRASTRUCTURE

Objectives and Strategies

To realise one of the social objectives of "Uplifting health, fitness and education standards of the entire nation", the Ministry of Health has laid down the following objectives.

1. To enable every citizen to attain full life expectancy and enjoy longevity of life.

2. To ensure that every citizen is free from diseases.

To realise these objectives, all health activities are implemented in conformity with the following strategies.

1. Widespread disseminations of health information and education to reach the rural areas.

2. Enhancing disease prevention activities.

3. Providing effective treatment of prevailing diseases.

Ministry of Health

The Ministry of Health is the major organization responsible for raising the health status of the people and accomplishes this through provision of comprehensive health services, viz promotive, preventive, curative and rehabilitative measures.

The Ministry of Health is headed by the Minister who is assisted by two Deputy Ministers. The Ministry has seven functioning departments, each under a Director General. They are Department of Health Planning, Department of Health, Department of Medical Science, Department of Medical Research (Lower Myanmar), Department of Medical Research (Upper Myanmar), Department of Medical Research (Central Myanmar) and Department of Traditional Medicine. All these departments are further divided according to their functions and responsibilities.

Maximum community participation in health activities is encouraged. Collaboration with related departments and social organizations has been promoted by the ministry.

Department of Health Planning

The Department of Health Planning comprises of the following divisions:

- Planning Division
- Health Information Division
- Research and Development Division
- Co-ordination Division

For optimum utilization of human, monetary and material resources, in the context of the National Health Policy and with the need to provide comprehensive health services, it is necessary to systematically develop health plans. The availability of reliable statistics and information is a vital prerequisite in such an effort. The Department of Health Planning is responsible for formulating the National Health Plan and for supervision, monitoring and evaluation of the National Health Plan implementation. The Department also compiles health data and disseminates health information.

Department of Health

The Department of Health, one of the seven departments under the Ministry of Health is responsible for providing health care services to the entire population in the country. Under the supervision of the Director General and Deputy Directors General, there are 9 Directors who are leading and managing the following divisions.

- Administration
- Planning
- Public Health
- Medical Care
- Disease Control
- Food and Drug Administration
- National Health Laboratory
- Occupational Health
- Nursing

Among these divisions, the public health division is responsible for primary health care and basic health services, nutrition promotion and research, environmental sanitation, maternal and child health services and school health services. The medical care division is responsible for setting hospital specific goals and management of hospital services. The division also undertakes procurement, storage and distribution of medicines, medical instruments and equipment for all health institutions. Functions of the disease control division cover prevention and control of infectious diseases, disease surveillance, outbreak investigation and response and capacity building.

Food and drug administration division is responsible for registration and licensing of drugs and food, quality control of registered drugs, processed food, imported food and food for export. The National Health Laboratory is responsible for routine laboratory investigation, special lab-taskforce and public health work, training, research and quality assurance. Occupational health division takes the responsibility for health promotion in work places, environmental monitoring of work places and biological monitoring of exposed workers. The division is also providing health education on occupational hazards.

Department of Traditional Medicine

Traditional Medicine promotion office was established under the Department of Health in 1953. It was organized as a division in 1972 managed by an Assistant Director who was responsible for the development of the services under the technical guidance of the State Traditional Medicine Council. It became the focal point for all the activities related to traditional medicine.

The Government upgraded the division to a separate Department in August 1989. It was reorganized and expanded in 1998, to provide comprehensive traditional medicine services through existing health care system in line with the National Health Plan. The other objectives of the department are to review and explore means to develop safe and efficacious new therapeutic agents and medicine and to produce competent traditional medicine practitioners.

University of Traditional Medicine (Mandalay)

Department of Medical Science

The Department of Medical Science is responsible for training and production of all categories of health personnel with the objective to produce appropriate mix of competent Human Resources for Health for successful implementation of the National Health vision and mission.

The department has five divisions which are Graduate/ Nursing Training Division, Postgraduate Training & Planning Division, Foreign Relation & Library Division, Administrative & Budget Division and Medical Resource Center.

The Department of Medical Science supervises the educational programmes and training processes for quality improvement.

Human Resources for Health Workshop, Nay Pyi Taw

University of Public Health, Yangon

University of Medicine, Magway

Nursing Training School, Bamaw

Department of Medical Research (Lower Myanmar)

The Department of Medical Research (Lower Myanmar) is organized with 22 research divisions, 8 supporting divisions and 10 clinical research units of various disciplines. In accordance with National Health Plan, the department is conducting research not only in six major diseases namely malaria, HIV//AIDs, TB, diarrhea and dysentery, diabetes and hypertension but also in application of traditional medicines and investigating of reputed medicinal plants and operational research under the guidance of Ministry of Health. It's main function includes organizing research in various fields, promoting research capability, and supporting researchers from health institutes, universities and other departments under the Ministry of Health. Research capacity strengthening has been achieved through provision of regular research methodology training, diagnostic laboratory training and advanced technology training. Promotion of research activities is made by organizing the Myanmar Health Research Congress annually as well as many other workshops, seminars and scientific talks on relevant health issues of current interest. During 2008, production of avian Russell's viper anti-venom from hen's egg has been carried out successfully and human trial is in progress.

Workshop on National Health Research Management

Sample Collection for Air Quality Assessment

Analysis of Air Quality Parameters at National Poison Control Centre

Department of Medical Research (Upper Myanmar)

In 2001, Department of Medical Research (Upper Myanmar) was established in Sitha, Pyin Oo Lwin Township. The department started functioning in 1999 in Mandalay before moving to the present location. Traditional medicine research is one of the main missions of the department. Herbal medicinal plants all over the country are collected and nurtured in the herbal garden of the department. Up to now, 518 medicinal plant species are being grown in the herbal garden.

Research activities concerned with Traditional Medicines include study on safety, therapeutic efficacy and clinical applications on reputed traditional medicine formulations [TMF], popular herbal drugs in the market and exploration of potential new herbal remedies. These efforts are directed towards the effective prevention, control and treatment of six major diseases and other diseases prevailing in the country.

To strengthen the research capacity of the department, workshops on reproductive health and malaria research were conducted with consultants from World Health Organization (WHO). Collaborative research activities have been carried out with the partners from hospitals, University of Medicine (Mandalay) and its' allied institutions, University of Traditional Medicine, disease control programmes in Mandalay and Upper Myanmar.

Department of Medical Research (Central Myanmar)

Established in 2003, Department of Medical Research (Central Myanmar) is formed with three Research Divisions and one supportive division including 11 research units and 7 supportive units in 2008. Biomedical Research Division mainly conduct research on prostate, breast, stomach and oral cancer with the aims of improving diagnosis, to help in determination of treatment, prediction of prognosis and prevention of these cancers. Free cytological screening service of cervical cancer is being conducted in collaboration with 200-bedded Pyinmana General Hospital for early case detection. Surveillance of infectious diseases especially influenza, diarrhoea and dysentery diseases and respiratory diseases are also being conducted. Occurrence of HIV among leprosy patients is also being studied.

To conduct the scientific traditional medical research, clinical research unit is formed and efficacy testing of traditional medicine formulation for the treatment of malaria and diabetes mellitus is being carried out. Social and behavioral research on malaria and tuberculosis are also done. Workshops on health research methodology and advanced immuno-histochemical techniques have also been organized to strengthen capacity and to disseminate new techniques. Clinicians, scientists, academicians and laboratory personnel from departments, universities and hospital under the Ministry of Health participated at the workshops.

HEALTH SERVICES IN MYANMAR

The Ministry of Health is providing comprehensive health services covering promotive, preventive, curative and rehabilitative aspects to raise the health status and prolong the lives of the citizens. With the objective of achieving Health for All goals, successive National Health Plans have been developed and implemented in accordance with the guidelines of the National Health Policy.

The basic health staff down to the grass root level are providing promotive, preventive, curative and rehabilitative services through Primary Health Care approach. Infrastructure for service delivery is based upon sub-rural health centre and rural health centre where Midwives, Lady Health Visitor and Health Assistant are assigned to provide primary health care to the rural community.

Those who need special care are referred to Station Hospital, Township Hospital, District Hospital and to Specialist Hospital successively. At the State/Divisional level, the State/Divisional Health Department is responsible for State/ Divisional planning, coordination, training and technical support, close supervision, monitoring and evaluation of health services. At the peripheral level, i.e. the township level actual provision of health services to the community is undertaken. The Township Health Department forms the back bone for primary and secondary health care, covering 100,000 to 200,000 people.

In each township, there is a township hospital which may be 16/25 or 50 bedded depending on the size of population of the township. Each township has at least one or two station hospitals and 4-7 RHCs under its jurisdiction to provide health services to the rural population. Urban Health Center, School Health Team and Maternal and Child Health Center are taking care for urban population, in addition to the specifically assigned functions. Each RHC has four sub-centres covered by a midwife and public health supervisor grade 2 at the village level. In addition there are voluntary health workers (community health worker and auxiliary midwives) in outreach villages providing Primary Health Care to the community.

The main areas of service delivery and support activities are presented here:

1. Health Service Delivery in the context of Primary Health Care
2. Services for the Target Population Group
3. Promoting Health, Ensuring Healthy Environment and Protecting Consumers
4. Controlling Communicable Diseases
5. Health in Natural Disaster

Health Service Delivery in the context of Primary Health Care

Basic Health Services

Basic health service is one of the essential components of rural health development scheme. Access to health care for 70% of country population residing in rural areas has been improved through the expansion of health manpower in terms of basic health staffs and voluntary health workers, i.e. community health workers and auxiliary midwives.

Basic health services unit, public health section of department of health is responsible for implementation of health care activities especially for rural areas through primary health care approach. It also initiated to strengthen the capacity not only among basic health staffs also the voluntary health workers, improving management in delivering the health services.

Basic health staffs have been providing health care services in terms of maternal and child health care, nutrition promotion, school health, environmental health, expanded programme of immunization and disease control activities, such as TB, Malaria, HIV/AIDS, Leprosy, and other communicable diseases, including emergency response in case of disaster to cover 70% of country population, residing especially in rural areas.

They also have to collect the data on health and health related sectors followed by monthly reporting for monitoring, supervision and mid-year and yearly evaluation.

Curative Services

Curative services are provided by various categories of health institutions. There are General hospitals, Specialist hospitals, Teaching hospitals, State/Division hospitals, District hospitals, Township hospitals in urban area. Sub-township hospitals, Station hospitals, Rural Health Centres and Sub-Rural Health Centres are serving rural people by providing comprehensive health care services including public health with available diagnostic facilities. There are a total of 846 public hospitals (820 under Ministry of Health and 26 under other Ministries) in the whole country.

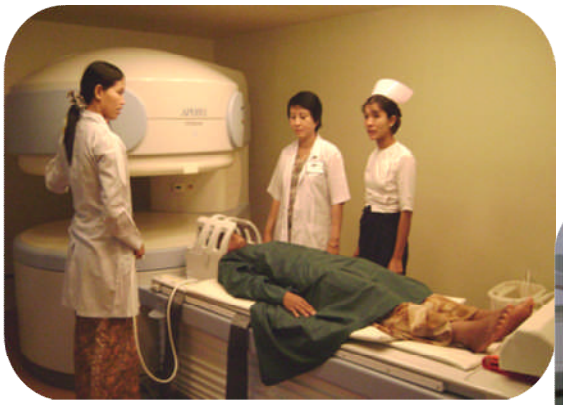
Station Hospitals including Sub-township Hospitals are basic medical units with essential curative elements such as general medical and surgical services and obstetric facilities. The population residing in rural area are covered by Station Hospitals. Township Hospitals situated at 10 to 20 kilometers away from the station hospitals are providing health care services including laboratory, dental and also major surgical procedures and acting as the first referral health institutions for those who required better care. Specialist services are well assessed at District and some 50 bedded Township Hospitals where intensive care unit with life saving facilities are available. More advanced secondary and tertiary health care services are provided at the State/Division Level hospitals, Central and Teaching hospitals.

To ensure adequate coverage of hospital services in every state and division, hospital upgrading project was planned and implemented every 5 year. It also includes establishment of new hospitals in remote area and increasing hospital beds for those area with high population density especially the districts with rapid socioeconomic development.

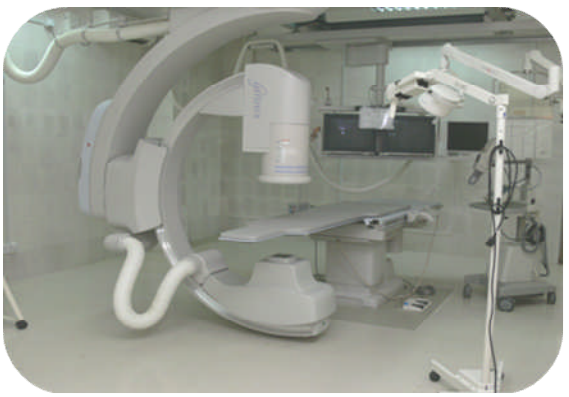
By the end of March 2009, total government hospitals is 846, increasing 30% from 1988. Total hospital beds provided in public hospitals under the Ministry of Health in 2009 are 37053. Institution based health care quality was improved during last few years. Modern diagnostic and therapeutic facilities have been equipped in most of the central, teaching and state /division hospitals.

As a result of strengthening hospitals with both competent human resources and materials, various sophisticated surgical and medical interventions like renal transplant, open heart surgery, cardiac catheterization, angiogram and plastic surgery of traumatically amputee limbs could be performed.

One significant improvement for tertiary care in 2008 is establishment of 1000 bedded General Hospital in Nay Pyi Taw. This hospital is providing general medical and special care including cardiology, pulmonary, urology, neurology, gastro-intestinal and hepatology. Intensive Care Unit with Emergency medical and surgical services are now available for those living in middle Myanmar.



Modern Diagnostics and Therapeutic Facilities
Nay Pyi Taw 1000 bedded hospital



The health development and provision of medical care services of border area have been undertaken since 1989 and up to March of 2009, 100 hospitals, 106 dispensaries, 62 rural health centres and 140 sub-rural health centres have been established and functioning in co-operation with other related departments and ministries, particularly the Ministry for the Development of National Races and Border Area .

Health Facilities in Rural and Border Area

With partnership approach, provision and donation of hospital equipment and supplies by the Government and private donors have taken place in almost all hospitals in Myanmar. Local community and private donors have contributed in curative health service in terms of cash or kind including medical equipment. The Hospital Management Committees led by local administrative authority and members from related departments have been organized and are making coordinated effort to fulfill needs of the hospitals according to functional requirements.

Outreach cataract surgical teams, reconstructive surgery teams and general medical and surgical teams from Eye, ENT hospitals, central, state and divisional and 200 bedded hospitals have provided their services throughout the country. The services are free and other costs for out-reach services were borne by NGOs and other individual donors.

Along with curative service, patient centered nursing care has been focused and upgraded both in managerial and practical aspects. The Nursing Division under the Department of Health could provide training on nursing leadership and management development to strengthen nursing services in collaboration with WHO and International Council of Nurses.

Access to Essential Medicines

Essential Medicines are those that satisfy the priority needs of the population. They should, therefore, be available at all times, in adequate amounts and in the appropriate dosage forms.

Access to medicines depends on many factors, notably rational selection and use of medicines, adequate and sustainable financing, affordable prices, and reliable supply systems. When considering access to essential medicines, one must start first with ensuring that the medicines are available. This means the medicines must be manufactured and formulated in usable form and made available in the market. Pharmaceutical companies invest in research, development, formulation and subsequent sale of medicine. Medicine supply and distribution are therefore key functions in addressing access. Getting essential medicines to where they need requires an engine to move things forward; the engine is an adequately trained and skilled human resources.

Dissemination of Message on Essential Medicines Concept and Rational Use of Medicine is carried out through providing pamphlets, posters, newsletters and Standard Treatment Guidelines at all levels of Health Facilities. Awareness Promoting Campaign on Rational Use of Medicine is conducted for those participating in public and private sectors, NGOs, and also for local authorities at different levels of community.

Promotion of Community Awareness on Rational Use of Medicines in Ngaputaw Township, Ayeyawaddy

Workshop on General Agreement on Trade in Services (GATS) and Trade in Health Services, Trade Related Intellectual Property (TRIPS), Patents and Access to Medicines was conducted in Nay Pyi Taw at Royal Kumudra Hotel from 21-22 October 2008. A total of (30) participants from Ministry of Health, other related Ministries and NGOs attended.

Oral Health

Through the activities of Primary Oral Health Care Project, jointly sponsored by the Ministry of Health and World Health Organization, fluoridated tooth pastes and tooth brushes were distributed to primary schools to initiate school-based toothbrushing programmes.

Realizing the fact that appropriate and consistent fluoride exposure is the utmost important in promoting oral health and to prevent dental caries in population groups, an advocacy process to promote availability and affordability of fluoride toothpastes has commenced since 2000.

Myanmar has 25 different brands of fluoride toothpastes produced by 7 local industries and 67% of the produce was tested to be efficacious to prevent dental caries. The Oral Health Unit had already developed the criteria for labeling requirements and user-instruction in Myanmar language, and has been conducting meetings with manufacturers to be in effect in the near future.

While promotive and preventive measures are being emphasized to promote the oral health status of Myanmar, curative services were not being left, neglected. Newly graduated dentists have been posted in hospitals, school health teams, and urban health centres countrywide. By first quarter 2009, 777 dental professionals were in the public sector to provide dental care for Myanmar. Research and surveys to develop fluoride map of Myanmar, dental fluorosis mapping for Myanmar and scientific documentation of advocacy process are also in progress with the Oral Health Unit.

Services for the Target Population Group

Maternal and Child Health

Maternal and Child Health including newborn care has been a priority issue in the National Health Plan, aiming at reducing the maternal, newborn, and infant and children morbidity and mortality. Approximately 1.3 million women give birth each year in Myanmar, thus, intensive efforts have been put to improve maternal and newborn health (MNH) services through various activities especially focusing on safe motherhood. While attempting to recruit more midwives in the health system, expanding the availability of skilled birth attendants is ensured through building capacity of Auxiliary Midwife (AMWs) by improving their midwifery skill, aiming to have at least one skilled birth attendant in each and every village. The ratio of midwifery skilled providers (including AMW) to village at present is 1:2. In addition, Clean Delivery Kits are supplied to pregnant mothers during their Antenatal visit to health centre or during home visits of midwives.

The health system had focused only on the conventional maternal, newborn and child care before 1988. After that period with the adoption of comprehensive reproductive health care in life cycle approach with emphasis on safe motherhood by ICPD (Cairo, 1994), Myanmar incorporated the comprehensive reproductive health care into the conventional maternal and child health care programme.

Maternal and child health care services are provided both in urban and rural settings and it is also a crucial component of National Health Plan. The maternal and child health care, consisting of antenatal care, aseptic and safe delivery, postnatal care, newborn care, under-one infant care, immunization, growth monitoring of under-three children, nutritional education, control of diarrhea diseases and management of acute respiratory infection, has been provided by basic health workers with the assistance of voluntary health workers and the community all over the country. With the advent of People's Health Plan in 1978, Primary Health Care including MCH network has been further extended and expanded both in human resources and improvement in quality.

Major Partners

The Ministry of Health has accomplished closed cooperation with several organizations within the UN system, in particular with organizations playing an important role in public health. The WHO, UNICEF, UNDP, UNFPA are main resources for the provision of technical assistance and involve in assisting various health care activities. Myanmar has several ongoing health care projects assisted by the WHO. Similarly UNICEF involves in health projects mainly for women and child health care. UNICEF has been supporting development projects under the World Summit for Children and Expanded Programme for Immunization. UNICEF has provided special programmes on maternal and child health care through Child Survival Project (1991-1995), Integrated Management of Maternal and Child Care (IMMCI) (1995-2000), and Woman and Child Health Development (WCHD) (2001 onwards). In addition, UNFPA has been a major supporter of reproductive health activities since 1996 and mainly concerned with logistic supply of reproductive health services. UNDP also has been supporting several developmental projects in health field especially for the border area.

Better cooperation and coordination by national NGOs have been developed in line with the strong political commitment to ICPD goals and MDGs. National NGO such as Myanmar Maternal and Child Welfare Association (MMCWA) plays an important role in provision of maternal and child care services through their voluntarism. All these maternal and child health care activities have been carried out within the context of National Health Plan, under the guidance of National Health Committee.

Ministry of Health is also collaborating with other related Ministries, INGOs and NNGOs in provision of comprehensive health care. They are Ministry of Social Welfare, Ministry of Education, Myanmar Women's Affairs Federation (MWAF), Myanmar Maternal and Child Welfare Association (MMCWA). MRCS (Myanmar Red Cross Society), Save the Children, World Vision International and JICA and other 25 international NGOs.

Some key approaches for attaining maternal and child health related MDGs

- Special emphasis to implement the Making Pregnancy Safer initiative, as a high priority component of reproductive health strategy
- Introducing voluntary counseling for testing (VCT) for prevention of mother to child transmission (PMCT) in routine AN Care
- Strengthening collaboration between reproductive health programmes and other related key public health programmes such as immunization (utilization of safe delivery kits, improving TT2), nutrition (management of anaemia in pregnancy, iron folate tablets, deworming in pregnancy), malaria (prevention and management of malaria in pregnancy)
- Development in progress of reproductive health five years strategic plan (2004-2008)
- Strengthening the effective partnership among key stakeholders for promotion of reproductive health issues.

Women and Child Health Development Project (WCHD)

Women and Child Health Development activities have been implemented since 2001 with the goal of achieving Millennium Development Goals and the following objectives, targeting health of mother, newborn, adolescent and children.

General objective

- To provide quality health care services for women, children and adolescent in order to reduce under five mortality rate and maternal mortality rate and to promote health of the women, children and adolescent.

Specific objectives

- To reduce the under five mortality rate to achieve Millennium Development Goal.
- To reduce the maternal mortality to achieve Millennium Development Goal.
- To ensure quality health services for children, adolescent and women

WCHD strategies aim at ensuring quality health services are accessible and affordable for women, children and adolescent and include 4 components: namely, women health development, child health development, adolescent health development and newborn health development.

Strategies

1. Incorporating available strategies into the new program. IMCI for Child Health, Integrated Management of pregnancy and Childbirth (IMPAC) for Women Health and Life Skills Education for Health (LSEH) for adolescent Health.
2. Initiating coordination between departments, national/international agencies and organizations involved in health of women, children and adolescent.
3. Expanding WCHD activities in 12 new townships per year from 2006 to 2010.
4. Reinforcing IMMCI activities in areas where WCHD activities are not yet implemented.

Strategies have focused on the following five areas -

1. Strengthening of organization and management
2. Improvement of skill of Basic health Staff
3. Improvement of the Health system
4. Improvement of community participation and family practice.
5. Surveys for evidence based decision making

WCHD project had conducted nation-wide cause-specific under five mortality survey (2002-2003), nation-wide cause specific maternal mortality survey (2004-2005), study on key family practices and local terminology for selected ethic groups (2004) and study on AMW performance (2005).

In 2008, planning meeting on child survival forum was organized with the aim of ensuring achievement of Millennium Development Goal of two third reduction of under five mortality. The objectives of organizing child survival forum are to finalize a list of high impact interventions based on Epidemiological Profile, to develop and to apply the technical standards to support the selected interventions, to conduct needs assessment and analysis for scaling up of these high impact interventions, to do advocacy and resource mobilization, to coordinate all partners and regular monitoring of activities to set up a data base on all Child Survival research, reports etc. Working committee for this forum was formed and this child survival forum will be conducted quarterly.

Future plan

Women and Child Health project is to be expanded 12 townships per year until 2010. Refresher training as well as retraining will be conducted with the aim of building capacity of basic health staff.

Essential Obstetric Care (EOC) coverage, women's access to quality obstetric services, performance of EOC facilities, utilization of EOC service and quality of EOC services will be assessed. These assessments will provide evidence base for policy and programme development and identification of priority issues and intervention.

Field Monitoring Activities for WCHD

Gender and Women's Health

Research on gender issues

Issue of gender equity and equality is still a novelty in Myanmar. More research works are in need to explore the role of women and men in communities. Research done among rural communities in 2005 indicated that married females in poor families are mainly responsible for household chores while husbands for earning. No marked discrimination of what a wife or a husband should do was observed. Switching roles sometimes, as situation like illness or confinement calls for, were observed indicating family responsibility were shared between wife and husband. In a study in 2006 in peri-urban and urban area, it was found that the views on sharing of resources, utilizing health services between women and men, societal values and belief were found to be different to those observed in rural communities although basic roles of women and men were similar.

A study in 2005 assessing knowledge, attitude and practices of basic health staff on gender issues indicated the need to provide training to basic health staff on concepts and related practices within the health related frame work for gender equity and alleviation of poverty. The study also provided rich back ground information for use in preparing training modules for them.

A study exploring gender based domestic violence in rural and peri-urban communities is to be conducted to identify causes, magnitude, types and consequences of gender based domestic violence among rural and peri-urban poor. It is expected that findings from the study will provide ground work for prevention of gender based domestic violence.

Trainings

Trainings have been provided to basic health staff on concepts and related practices within the health related framework of gender and equity. Gender issues have been sensitized to almost 2000 basic health staff from 27 townships and specific gender and health trainings has been given to over 800 of them in 14 townships.

Training modules were also developed for sensitizing health managers on gender and health emphasizing on specific diseases applying gender analysis tools and gender mainstreaming tools. Training team members from state and divisional health departments have also been trained using these modules to enable them to monitor gender and health activities at township levels.

Trainings have been provided to mainstream gender issues in four health service programmes, namely Tuberculosis, HIV/AIDS, Leprosy and Reproductive Health. All these activities will lead to development of strategies for integrating gender equity into policy, programmes and capacity building in the health sector in the future.

Gender analysis and mainstreaming tools for basic health staff and the community provided the opportunity to make service providers and community accept, understand and consider gender issues and making them gender aware and gender sensitive in their service provision and care seeking respectively.

Community Support and Reproductive Health Behaviour

In Myanmar community, there is an aged old tradition where inter-personal interactions are based on intimacy and amiability. This traditionally upheld kinship has provided a social network through which neighbours and friends, growing together and knowing each other, exchange mutual help and support in times of need. Correct knowledge and attitudes are essential yet insufficient for practices and behaviours conducive to health. Ability to make right choice and environment favouring to do so are additional requirements. Generating community support encouraging correct behaviours and impeding unwholesome ones goes a long way in making individuals' practices health promoting.

In this context making reproductive health education programmes realistic and in conformity with real life circumstances will need community support. Support of the community members willing to volunteer will provide mechanisms to bridge the gap between technically oriented initiatives of health workers and customary and culturally imbued beliefs and practices of the clients in the community.

In collaboration with UNFPA and JOICFP, Ministry of Health (Central Health Education Bureau) has launched a Reproductive Health Behaviour Change Communication programme in 2002, which now covers 34 townships. Through establishing correct reproductive health behaviour in the community the programme aims to contribute in reducing maternal mortalities one of the goals included in the MDGs, in the country. The activities included in the programme are formation of Community Support Group (CSG), providing health education, timely referral of maternal cases to hospitals and clinics and providing support for patients lacking assistance.

Collaboration of township authorities, township health departments and basic health staff play important roles in sustaining the activities. The programme after a considerable period of implementation has gained momentum and made substantial achievements thanks to the concerted efforts of all partners.

Establishing Youth Information Corners and Community Support Groups

School and Adolescent Health

Based on report by the Department of Education Planning and Training, student population in Myanmar is about 7.8 million. School Health Programme already integrated into PHC and other health development programmes since implementation of first Peoples' Health Plan (1978-79) has been implemented with the objective of promoting the health standard of entire student youth through health promoting school programme.

School health activities are being carried out by School Health Section of Department of Health in collaboration with international agencies like WHO, UNICEF and NGOs. Under the guidance of national health committee, various school health committees have been formed at each administrative levels since 2000. The school health committees take the leadership roles and give guidance in implementing the school health programme systematically and efficiently.

School health strategies were based on the health objective under the national social objectives, the national health policy, national population policy and the primary health care approach aiming towards a successful implementation of the school health programme.

School health strategies

1. Conducting refresher training for teachers on the development of health promoting schools to promote the health standards of the entire student youth, the skills and knowledge needed for adopting a healthy life style at all levels.
2. Enhancing better quality and coverage of school health care by providing sufficient manpower and supplies.
3. Establishing school health committees at different levels for monitoring and evaluation mechanisms to ensure successful implementation.
4. Conducting research on the impact of school health programme to promote existing school health activities.
5. Promoting co-ordination and collaboration mechanisms with ministry of education and other related departments.
6. Organising resources for national school health programme through the involvement of local and international NGO's and international organizations.

With the objective to enhance health promoting school activities, the Ministry of Health, in collaboration with the Ministry of Education launched the School Health Week of 2008 in the 2nd week of August. The activities were held in all basic education schools of the country from August 11 to 17, 2008.

As part of school deworming programme 6 million school age children and preschool age children from all States and Divisions were dewormed biannually during 2008 as an integrated approach with the support of WHO and UNICEF.

Ministry of Health has also attempted to improve coordination between a number of primary health care projects, and incorporate an adolescent health component into the health promoting schools strategy and transforming it into "School and Adolescent Health" in the 2001-2006 National Health Plan. Several ongoing collaborative programmes, through MOH, departments and other ministries (e.g. Education, Sports, Immigration and Population, Information, and Religious Affairs) have components that address the needs of young people. The national five-year adolescent health and development strategic plan (2009-2013) was developed to address the priority issues affecting the health of young people in the Union of Myanmar.

Promoting Healthy Ageing

With the transitions in epidemiology, demography and socio-economic conditions, age distribution is changing and increasing number of ageing population is one of the emerging issues in the developing countries including Myanmar. Ageing population with complex health care needs is a true challenge for health care delivery. Rapid urbanization with life style changes, unfriendly environment, and changing family structure is also affecting the older people, their families and the country.

To overcome the effect of growing elderly population on health aspect, elderly health care project was initiated as one of the primary health care programme since 1992-93 in six townships. It was expanded six townships yearly and now, implemented in 74 project townships. The elderly people were taken care at health centres and hospitals on every Wednesday. Based on the concept of active ageing, the project mainly focused on preventive and promotive aspect.

Doctors and Nurses from the Township hospitals as well as Basic Health Staff were trained for basic elderly health care and case management of elderly patients. They were trained to be able to detect minor as well as some major illnesses of the elderly. They are encouraged to take care of minor illnesses and to refer the serious and complicated cases to the nearest Township Hospital. They are also trained to understand the underlying causes of the illnesses and influencing factors for the physical, mental and social health problems that the aged are facing.

As health education/ counseling is an essential component of the elderly health care, it is also included in the training with special emphasis on communication skills for educating and counseling the elderly people as well as their care givers. Since the activity of daily living that is important not only for the elderly people but also for the care givers, the BHS were also trained on physical activities to be able to demonstrate the daily physical exercises for the elderly people. Conducting the base line survey is required for the identification of the common health problems among the elderly in the community and for the future planning, they were also trained for that activity.

International Day for Elderly people is usually held all over the country on the 1st of October and on that day, the elderly people are given gifts and medical care including eye care and oral care by health personnel assisted by the local NGOs and voluntary health workers. In Myanmar culture, the people usually give respect to older people and donate cash or kinds to elderly clinic in some townships. Local NGOs participate in elder health care activities like helping elderly people to attend the clinic, health education, counseling and commemoration of international day for elderly people, etc. So, local NGOs and volunteers (Community Health Workers and Auxiliary Midwives) were also trained to be aware and understand the issue of elderly health problems and the important of their participation in elderly health care. Collaboration and coordination with related departments like Social Welfare Department and the Sport and Physical Department are also contributing to the success of activities.

Promoting Health, Ensuring Healthy Environment and Protecting Consumers

Environmental Sanitation and Safe Water

Environmental Sanitation Division (ESD) was founded under Public Health Section of Health Directorate office since 1952. It aims to attain universal coverage of safe water supply and sanitation and to reduce the incidence of water and excreta-related diseases among the people and there by totally eliminated them.

Environmental Sanitation Division Under the Department of Health is implementing the Environmental Sanitation activities such as fly-proof sanitary latrine construction for community, school and health institution and water supply for health and school institutions in rural areas.

In 1998, the National Sanitation Week (NSW) movement was initiated for increasing the sanitation coverage in line with the National Health Plan. Sanitation coverage dramatically increased from 45% in 1997 to 80.2% in 2008 following the National Sanitation Weeks.

ESD has carried out the Drinking Water Quality Surveillance and monitoring projects in Nyaungshwe in Southern Shan State, Dawei in Tanintharyi Division and Maubin and Wakema in Ayeyawaddy Division. Moreover ESD, firstly, implemented the Water Treatment Plant by means of Horizontal Roughing filtration Process at Ohn-ny Station Hospital in Kawa township of Bago Division.

Water Safety Plan have been implemented by ESD in Tatkone and Lewe townships in 2007. Workshop on Water Safety Plan for Urban Water Treatment Plant was conducted in 2008 at the Department of Health. Concerned Departments and Private companies relating to the water treatment activity participated in this workshop.

Following the guidelines of National Health Committee, leadership of Ministry of Health, supervision of Department of Health and concerted effort of ESD with participation of community and authorities concerned, the National Sanitation Coverage is on the track to meet the UN Millennium Development Goal.

Following cyclone Nagris, ESD carried out safe water supply, construction and utilization of fly-proof sanitary latrine, systematic disposal of garbage and personal hygiene activities for the cyclone affected people with participation of local people, authorities concerned, NGO.

The coverage of Urban and Rural Water Supply and Sanitation

Sanitation Coverage	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Rural	39	53	57	56.5	85.3	91.9	90.7	77.9	81.0	80.7	78.0
Urban	65	72	73	83.6	90.4	87.1	88.9	83.5	87.6	92.2	87.4
Union	45	60	62	63.1	86.6	88.4	90.3	82.4	82.7	83.6	80.2

Sources : Joint Monitoring Progress (JMP), Multiple Indicator Cluster Survey (MICS), National Sanitation Week Report (NSW)

Provision of safe water supply and sanitation for cyclone affected people

Mitigating Arsenic Problem

During the year 2008, Arsenic Mitigation Project had been implemented in Shan State (South), one township in Mandalay Division, one township in Rakhine State and (3) townships in Sagaing Division. Total number of drinking water resources tested in collaboration with UNICEF was 11174. Testing with field test-kits and reconfirmation of field results by Atomic Absorption Spectrophotometry (AAS) were implemented by OHD.

Healthy Work Places

Ensuring Healthy Work Places

The OHD (Occupational Health Division) has been providing trainings on Occupational health principles and practice including Occupational First Aid to employers, workers, medical officers, nurses and basic health staff. OHD has also provided surveillance of the workers health occupational diseases and working environment.

The Ministry of Health has collaborated with the Ministry of Labour for the formation of the "National Occupational Health and Safety Committee".

Monitoring Air Quality

The OHD monitored the ambient air quality at (4) states and (3) divisions in 2008. The OHD has also been implementing "Air Quality Monitoring Project for Yangon City" in collaboration with WHO since October 2008.

The Ministry of Health has collaborated with National Commission for Environmental Affairs (NCEA) from the Ministry of Forest in developing the "National Environmental Health Action Plan".

Monitoring of air quality in Yangon

Nutrition Promotion

The ultimate aim of the nutrition promotion activities in Myanmar is "Attainment of nutritional well-being of all citizens" as part of the overall socio-economic development by means of health and nutrition activities together with the cooperative efforts by the food production sector.

With the general objective to ensure that all citizens enjoy the nutritional state conducive to longevity and health, the nutrition promotion activities in Myanmar are implemented to realize the following specific objectives; to control / eliminate all forms of nutritional deficiency; to promote healthy dietary habits and lifestyles among people and to prevent over-nutrition and diet-related chronic diseases.

Interventions for major nutritional problems

1. Protein Energy Malnutrition (PEM)

- Growth Monitoring and Promotion for children under three years of age.
- Community-based nutrition rehabilitation centers (CNC) for moderately malnourished children in urban areas.
- Hospital -based nutrition rehabilitation units (HNU) for severely malnourished children in 30 townships.
- Community-based feeding centers (Village food Banks) for malnourished children in 191 rural villages of 31 townships.
- In 2008, Hospital Nutrition Units were expended to district level where pediatricians were present.
- Training of pediatrician and postgraduate student on management of severely malnourished children were conducted.

2. Iodine Deficiency Disorders (IDD)

- Universal salt iodization (USI) is the major long-term intervention for elimination of Iodine deficiency disorders.
- Quality of iodized salt was monitored by regular survey on iodine content of salt by titration and Urinary Iodine excretion conducted by National Nutrition Centre.
- At the State and Divisional level, salt quality was monitored as necessary by titration method.
- Public education program for iodized salt consumption to eliminate IDD was launched through radio, TV spot, videos with the voluntary assistance of popular movie stars.
- Ministry of Mine took a responsibility to check the iodine content of salt factory level, Yangon City Development Committee and Mandalay City Development Committee and Department of Developmental Affairs monitored the quality at retail level and basic health staff monitored at household level regularly.
- Laboratory of Nutrition Unit of Department of Health is responsible for regular assessment of Urinary excretion of iodine in school aged children every two years.

3. Iron Deficiency Anaemia (IDA)

- Iron supplementation for pregnant women throughout the country, biweekly iron supplementation for adolescent school girls in selected (20) townships were carried out and iron drops for children between 6 months and 3 years were provided in growth monitoring sessions.
- Nutrition education to increase consumption of iron rich food and to improve preparation of food for increase iron absorption were also done.
- Mass deworming programme for 2 years to 10 years old children was undertaken biannually and once during pregnancy for pregnant women.

4. Vitamin A Deficiency (VAD)

- Although Vitamin Deficiency is not a Public Health Problem, biannual supplementation with high-potency vitamin A capsule (Retinol) is the main intervention against vitamin A deficiency among under 5 years children to reduced morbidity and mortality rate and to enhance the growth of children.
- Vitamin A distribution programme was started since 1995 up to 2000. In 2000 It was integrated with National Immunization Days to get good coverage up to 2003. After 2003 biannual supplementation programme was continued to maintain the serum vitamin A status of all 6 months to five year old children.
- Lactating women are given one dose of Vitamin A (200,000 IU) within one month after delivery to ensure that the suckling baby (0-6 Months babies) gets sufficient vitamin A from the breast milk.

5. Vitamin B1 Deficiency (Beri Beri)

- Nation-wide Survey to explore Thiamine status of pregnant women and lactating mothers was carried out by Nutrition section of Department of Health in collaboration with Department of Medical Research (Lower Myanmar) in February 2009 .
- To reduce the infant mortality due to beri beri and to eliminate infantile beri beri as public health problem in Myanmar, the following activities are implemented.
  (1) Vitamin B1 Supplementation to pregnant women after 36 weeks of pregnancy until 3 months after delivery.
  (2) Effective treatment of infantile beri beri by Vitamin B1 injection together with hospital based surveillance system. And proper training of BHS and advocacy to general practitioners.
  (3) Nutrition Promotion by holding National seminar and Nutrition Promotion week Campaign
  (4) Community Survey on Thiamin status of pregnant women and lactating women , food habits and Anti thiaminase
  (5) Infantile beri beri surveillance system
  (6) Long term intervention by food diversification
  (7) Monitoring of Vitamin B1 distribution and usage

Nutrition Promotion Week Campaign

Central Launching Ceremony of the Nutrition Promotion Week took place at the meeting hall of the Ministry of Health, Nay Pyi Taw in September 2008. Professor Dr. Paing Soe, Deputy Minister gave the opening speech at the ceremony after which Vitamin A supplementation for 6 months to 5 years old children, Ferrous Sulphate tablets and vitamin B1 tablets distribution for pregnant women were carried out by guests of honour. Similar launching ceremonies were also done in capital city of all States and Divisions after which various nutrition promotion activities were carried out. These activities were also carried out at township level.

Health staff and volunteers participating in nutrition promotion activities

Food and Nutrition Assessment Survey

Opening ceremony of workshop on Vitamin B1 surveillance

Food and Nutrition Assessment Survey was done in Nargis cyclone-affected areas of Yangon division and Ayeyarwady division by Nutrition section of Department of Health in collaboration with UNICEF and WFP, with the financial support from UNICEF in September 2008. Based on the survey, it was found that 11% of under three years old children were malnourished and 2 % of under three years old were severely malnourished.

Tobacco Control Measures in Myanmar

World No-Tobacco Day Ceremony
Nay Pyi Taw, 2008

Myanmar became a Party to the WHO Framework Convention on Tobacco Control in 2005. The "Control of Smoking and Consumption of Tobacco Product Law" was enacted in May, 2006 and came into effect in May, 2007. The Law prohibits smoking at public places, public transport, health facilities and educational institutions; ban all forms of tobacco advertisements and prohibits sale of tobacco to and by minors. The Law also prohibits sale of tobacco products within the school compound and within 100 feet from the compound of the school. It prohibits sale by vending machine, sale of cigarettes in loose forms and requirement of health warnings in local language on tobacco products. Ministry of Health had conducted a series of multisectoral workshops in collaboration with WHO to strengthen law enforcement.

The Myanmar Tobacco Control Programme is implementing its activities in line with the six policies recommended in the "WHO Report on the Global Tobacco Epidemic 2008".

1. *Monitor tobacco use and prevention policies*: The National Tobacco Control Programme has been monitoring tobacco use through sentinel prevalence sentinel studies which were conducted in 2001, 2004, 2007 and 2009. The studies show a decline in smoking among adults 15 years and above, although there is no significant decline in smokeless tobacco use was observed. Prevalence of cigarette smoking among youth is monitored through Global Youth Tobacco Surveys conducted in 2001, 2004 and 2007 which shows significant decline in smoking prevalence among the students 13-15 years of age. Prevalence of chewing betel quid with tobacco remains high and is a challenging problem for tobacco control. Monitoring of prevention policies is also conducted through collection of data and reporting instruments such as Global Tobacco Control Reports.

2. *Protect people from tobacco smoke:* In line with the Myanmar Tobacco Control Policy and Plan of Action, all the health facilities had been established as smoke -free since 2001; schools started to establish "tobacco-free schools" in 2002 and sports grounds were declared smoke-free in 2002. The National legislation prohibits smoking at public places, public transport and in enclosed public places.

3. *Offer help to quit tobacco:* Community-based cessation programmes are being implemented in project townships where community facilitators were trained to provide support and counseling for tobacco users to quit. Clinical support for Nicotine Replacement Therapy and Establishment of Quit lines are yet to be implemented.

4. *Warn about the dangers of tobacco:* National legislation requires cigarette packages to display health warnings in local language. Measures are underway to enforce regulations for the health warnings to be rotating, pictorial as well as textual and to be displayed at least 30% of the front of cigarette packages.

5. *Enforce bans on tobacco advertising, promotion and sponsorship:* The 2006 Control of Smoking and Consumption of Tobacco Products Law prohibits all forms of direct and indirect advertising, promotion and sponsorship of tobacco. Even before the Law was enacted, tobacco advertisement on TV and Radio was prohibited in 2000-2001 in collaboration with Ministry of Information. Tobacco billboards had been totally banned since 2002 in collaboration with City Development Committees and Department of Development Affairs. Tobacco advertisement via print media was prohibited in 2002 in collaboration with the General Administrative Department.

6. *Raise taxes on tobacco:* Cigarette taxes in Myanmar are levied at 75% (commercial tax) of taxable turnover; Myanmar is among a few countries in the world which levied cigarette taxes higher than 70%. Advocacy workshops had been conducted to increase taxes harmoniously on all tobacco products such as cheroots, pipes, cigars, betel with tobacco etc.

Workshop on Enforcement of Tobacco Control Policy and Plan of Action, Nay Pyi Taw

Food and Drug Safety

Food and Drug Administration (FDA) formed under Department of Health since 1995, administered control activities not only in food and drug but also in cosmetic, medical device and household products. Law enforcement is undertaken under the guidance of Ministry of Health and Myanmar Food and Drug Board of Authority and supervised by Central Food and Drug Supervisory Committees. Control programmes are implemented by State / Division, District and Township Food and Drug Supervisory Committees within their respective jurisdictions. FDA offers laboratory service for controlling quality and safety of food, drug, cosmetic, medical device and household products. Mandalay FDA branch established in 2000 assists FDA's control work for upper Myanmar.

Local manufacturing facilities of food, drug, cosmetic, medical device and household products are inspected and certified on the basis of compliance with the required Good Manufacturing Practice and assisted in applying Hazard Analysis Critical Control Point methodology so as the final products meet the quality standard appropriate to their intended use and ensure consumer's health and benefit.

FDA takes necessary measures to ensure that only drugs that are registered are imported, the cosmetic product that are notified are placed in the market and to implement ASEAN Cosmetic Derivative by 1st January, 2008.

Importation and exportation of food, medical device and household products inspection and certification system is in place and protect the health of consumers and facilitate fair practices in trade. The sale of drug, food, cosmetic, medical device and household product s are regulated by Township Food and Drug Supervisory Committee, which consists of personnel from Department of Health, Department of General Administration, Myanmar Police Force, City Development Committees/ Developmental Affairs Department and Livestock Breeding and Veterinary Department.

FDA is also taking required activities relating to food and drug safety. The 23rd Meeting of ASEAN Working Group on Technical Cooperation in Pharmaceuticals (AWGTCP) was held in Yangon in October, 2007.

Controlling Communicable Diseases

Myanmar, after gaining independence, established campaigns to fight against major infectious diseases. Since 1978, integration of health services was carried out where the campaign or vertical programmes were all integrated into Basic Health Services using Primary Health Care approach.

Since then the basic health staff have been reoriented and trained to provide services for Malaria Control, implement Multi Drug Therapy Programme in controlling leprosy, case finding and treatment of TB cases, immunization of children against 6 major childhood diseases, control of diarrhoeal diseases and surveillance activities etc. Under the Disease Control Division and with the support of Central Epidemiological Unit, supervision, monitoring and technical support are provided by disease control teams at central level and state and division levels.

Diseases of National Concern

HIV/AIDS

In Myanmar, AIDS is one of the priority diseases included in the National Health Plan. National Health Committee has provided clear guidelines to fight AIDS as a disease of national concern. National AIDS Committee chaired by Minister for Health was formed in 1989 with related Ministries and representatives from National NGOs as members. Under the National level committee, State/Division, District and Township level committees were formed to provide guidance in implementation of HIV/AIDS activities.

The National AIDS Programme under Disease Control Division, Department of Health, Ministry of Health was organized with forty five AIDS/STD teams including six State and Divisional level

AIDS/STD teams. National AIDS Programme is the focal body for overall AIDS related activities which are being implemented in line with the National Health Plan in coordination with various stakeholders comprising of related Ministries, UN Agencies, both National and International NGOs, community including PLHIV (people living with HIV) as a national response.

Professor Dr. Kyaw Myint, Minister for Health,
delivered an inaugural speech at 2008 World AIDS Day commemoration ceremony

To determine the extent of HIV and AIDS problem in the country, an estimation Workshop was conducted in 2007 in Bangkok followed by in country workshop in Mandalay. Output of these workshops had indicated that there are approximately 242,000 adults and children living with HIV in Myanmar at the end of 2007, representing an estimated prevalence of 0.67% in a decreasing epidemic curve that had reached its peak in 2000 with the prevalence level of 0.94%. The next estimation workshop will also be conducted in 2009.

In line with global approach for "Three Ones" Principle, which states One HIV/AIDS Action Framework, One National Coordinating Authority and One Monitoring and Evaluation System, Myanmar has developed a multi-sectoral broad-based National Strategic Plan 2006-2010 with its operational plans involving all implementing partners which include related Ministries, UN Agencies and NGOs both National and International.

AIM of the National Strategic Plan

The National Strategic Plan for Myanmar aims at reducing HIV transmission and HIV- related morbidity, mortality, disability, social and economic impact.

Objectives of the National Strategic Plan

- Reduction of HIV transmission and vulnerability, particularly among people at highest risk;
- Improvement of the quality and length of life of people living with HIV through treatment, care and support; and
- Mitigation of the social, cultural and economic impacts of the epidemic.

HIV/AIDS Education among out of school youth

Students reading HIV/AIDS education materials with enthusiasm

In the National Strategic Plan, thirteen strategic directions are primarily defined to address the most pressing needs of populations at highest risk and the essential enhancement of the capacity of health systems to help respond to these needs as well as strengthening of comprehensive monitoring and evaluation mechanisms.

Priority	Strategic directions
Highest Priority	1. Reducing HIV related risk, vulnerability and impact among sex workers and their clients 2. Reducing HIV related risk, vulnerability and impact among men who have sex with men 3. Reducing HIV related risk, vulnerability and impact among drug users 4. Reducing HIV related risk, vulnerability and impact among partners and families of people living with HIV
High Priority	5. Reducing HIV related risk, vulnerability and impact among institutionalized populations 6. Reducing HIV related risk, vulnerability and impact among mobile populations 7. Reducing HIV related risk, vulnerability and impact among uniformed service personnel 8. Reducing HIV related risk, vulnerability and impact among young people
Priority	9. Enhancing prevention, care and treatment and support in the Workplace 10. Enhancing HIV prevention among men and women of reproductive age
Fundamental overarching issues	11. Meeting the needs of people living with HIV for comprehensive care, support and treatment 12. Enhancing the capacity of health systems, coordination and capacity of local NGOs and international NGOs 13. Monitoring and evaluation

The National AIDS Programme, Department of Health is implementing the following ten HIV/AIDS prevention and care activities:

1. Advocacy
2. Health Education
3. Prevention of sexual transmission of HIV and STD
4. Prevention of HIV transmission through injecting drug use
5. Prevention of mother to child transmission of HIV
6. Provision of safe blood supply
7. Provision of care and support
8. Enhancing the multisectoral collaboration and cooperation
9. Special intervention programmes
   - Cross border programmes
   - TB/HIV joint programmes
10. Supervision, monitoring and evaluation

HIV sentinel surveillance (2007)

Categories	HIV Prevalence (%)
High risk population	
- Male STI Patients	5.3
- Female Sex Workers	15.6
- Injection Drug Users	29.2
Low risk population	
- Blood Donors	0.4
- New Military Recruits	1.3
- Pregnant Women attending Antenatal Clinics	1.4
New Tuberculosis Patients	9.8
New Sentinel group	
- Men who have sex with men (MSM)	29.3

One of the positive achievements in response to HIV and AIDS in Myanmar is the political commitment of the decision makers as well as strong commitments of implementing partners both local and international in focused interventions in the areas of prevention, treatment and care among the most vulnerable populations. Government, international and national non-government and private entities had contributed to the national response. The National AIDS Programme also conduct Annual Review Meeting every year where AIDS/STD Teams and implementing partners develop future plan for the coming year through coordinated efforts so as to sustain the national response. Coordination and cooperation has been made with (7) UN Agencies, (22) International NGOs, (18) local NGOs and other related Ministries for implementation of activities through partnership approach for purposes of synergies, surge, effectiveness, efficiency and accountability.

TB/HIV joint programme

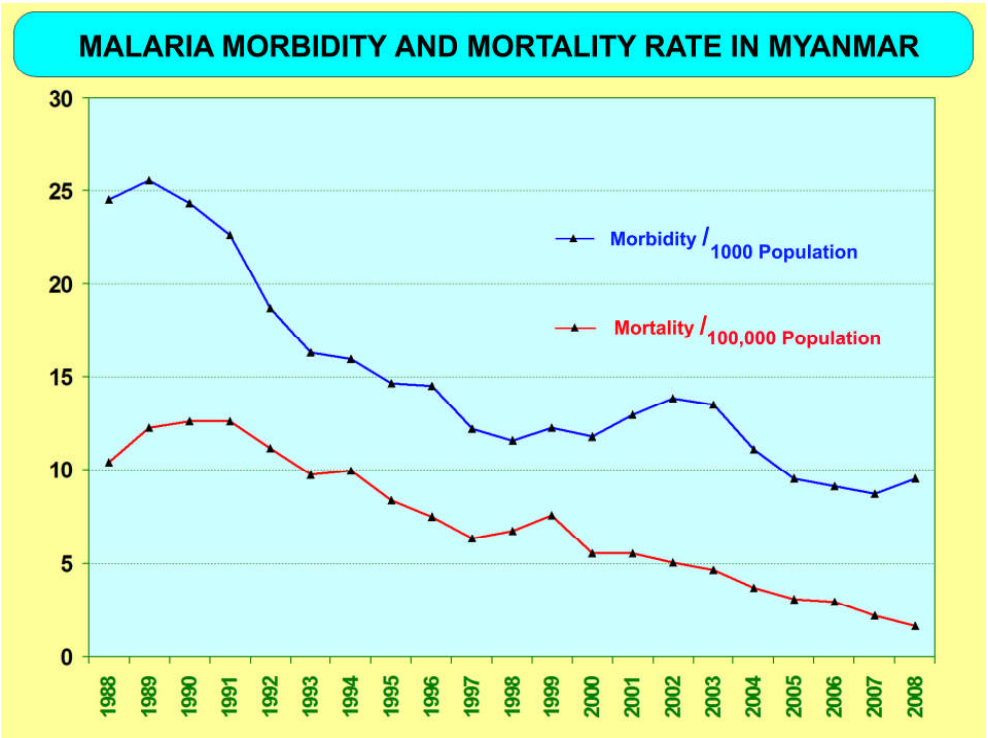
Workplace HIV/AIDS Prevention Education Outreach Activity

Achievements in 2008

- Voluntary confidential counseling and testing for HIV was made available in (291) sites across the country.
- Blood safety program had made progress covering all public hospitals in (325) townships.
- Prevention of mother to child transmission program has covered (125) townships and (38) hospitals.
- Anti retroviral Therapy (ART), Care and Support services for AIDS patients has been gradually made available and in 2008, (23) hospitals are providing ART for adult AIDS patients and (11) hospitals are providing ART for pediatric AIDS patients.
- Prophylaxis and treatment for opportunistic infections are being provided in all AIDS/STD Teams as well as all hospitals across the country.
- TB/HIV joint program is started since 2005 and now being implemented in (5) townships and integrated health care program in (2) townships in 2008.
- PLHIV networks are being formed at AIDS/STD teams for involvement of PLHIV in HIV/AIDS prevention, treatment and care activities.
- Community Home based care trainings are being conducted for basic health staff and care givers.
- Awareness about 100% Targeted Condom Promotion Programme among risk groups and general population, access to condom usage has increased and condom use has been actively promoted in the country especially among targeted groups.
- Syndromic Management of STD was implemented in (316) townships.
- Various elements of Harm reduction strategy were implemented in pilot areas such as Yangon, Mandalay, Myitkyina and Lashio since 2006 and has covered (21) townships in 2008.
- Methadone Maintenance Therapy was started in 2005 and (6) Drug Dependence Treatment and Rehabilitation Centres are providing the therapy in 2008.
- Bilateral collaborative activities for AIDS, TB and Malaria have been carried out in (16) townships along Myanmar-Thai border.
- Joint Action Plan for the Myanmar-Thailand Health Collaboration at the Border Areas (2008-2009) has been developed.

Malaria

Malaria is one of the priority diseases in Myanmar. It is a re-emerging public health problem due to climatic and ecological changes, uncontrolled population migration, development of multi-drug resistant P.falciparum parasite, development of insecticide resistant vectors and changes in behavior of malaria vectors. Long-term trend shows decreasing malaria morbidity and mortality in Myanmar.



The two major vectors for malaria transmission are *An. minimus* and *An. dirus*. In Rakhine State, in addition to these two major vectors, *An. annularis* is responsible for local transmission and it is highly resistant to DDT. *An. sundaicus* is responsible vector for malaria transmission in coastal regions. Drug resistant malaria has been detected along the international border areas particularly Myanmar Thai border and in some pocket areas of other parts of the country.

Aims and objectives of the National Malaria Control Program are reduction of malaria morbidity and mortality by 50% of the level in 2000 by 2010 and to achieve MDG by 2015 (To achieve MDG Goal 6 Target 8 - have halted by 2015, and began to reverse the incidence of malaria and other major diseases). The major approaches are (i) increasing accessibility to quality diagnosis and appropriate treatment according to national treatment guideline and (ii) scaling up the ITN (insecticide treated net) Program throughout the country.

National Malaria Control strategies are:

- Prevention and control of malaria by providing information, education and communication up to the grass root level
- Prevention and control of malaria by promoting personal protective measures and/or by introducing environmental measures as principle methods and application of chemical and biological methods in selected areas depending on local epidemiological condition and available resources
- Prevention, early detection and containment of epidemics
- Provision of early diagnosis and appropriate treatment
- To promote capacity building of malaria control program (human, financial and technical)
- To strengthen the partnership by means of intrasectoral and intersectoral cooperation and collaboration with public sector, private sector, local and international non-governmental organizations, UN agencies and neighboring countries
- To intensify community participation, involvement and empowerment
- To promote basic and applied field research

Activities of National Malaria Control Program

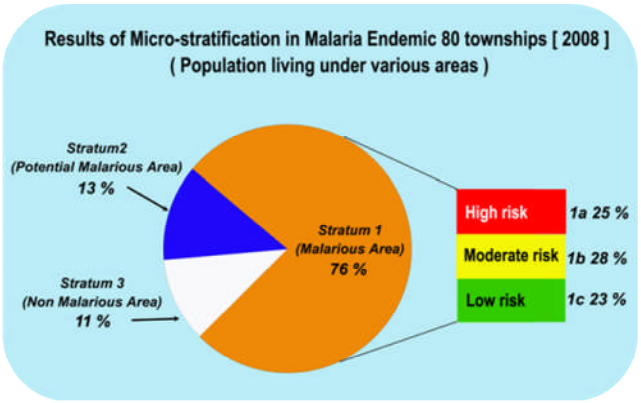
1. Information, Education and Communication

Dissemination of messages on malaria is carried out through various media channels with the emphasis on regular use of bed nets (if possible appropriate use of insecticide treated nets) and early seeking of quality diagnosis and appropriate treatment (if possible within 24 hours after onset of fever). Production and distribution of IEC materials is also carried out in different local languages for various ethnic groups and different target groups such as forest related travelers, pregnant women and general population. Advocacy activities are conducted to public and private sectors, NGOs, religious organizations and local authorities at different levels.

World Malaria Day (29th April, 2008) and National Malaria Week (25th April - 1st May, 2008) have been commemorated throughout the country with the aim of raising global, regional and national awareness of this terrible disease which is, however, curable and preventable and implementing the concerted effort to accelerate the control of malaria.

2. Preventive activities

Stratification of Areas for Malaria Control



In 2007, risk area stratification was carried out in 80 endemic townships of 15 states and divisions of Myanmar. Total population of 10,390,106 in 16,178 villages were covered by area stratification activity. In 80 endemic townships, 76% of population (7,931,446) was residing in malarious areas, 13% of population (1,306,152) was residing in potential malarious areas and 11% of population (1,152,508) was residing in non-malarious areas. In malarious areas, 25% of population (2,596,030) was residing in high risk areas, 28% of population (2,897,630) was residing in moderate risk areas and 23% of population (2,437,786) was residing in low risk areas. Package of malaria control activity was given according to the result of risk area stratification that ensures effective resource allocation.

Insecticide Treated Mosquito Nets

Selective and sustainable preventive measures are carried out emphasizing on personal protection and environmental management. With limited resources, areas were prioritized for ITN Program either distribution of Long Lasting Insecticidal Nets (LLIN) or impregnation of existing nets. In 2008, 71,605 LLINs were distributed in 824 villages of 17 endemic townships particularly in hard to reach areas. 354,079 existing nets were impregnated in 2982 villages of 50 endemic townships. Total population covered by ITN Program was 3,147,719.

Epidemic preparedness and response

Number of epidemics became reduced during last five years. Ecological surveillance and community based surveillance were implemented together with early case detection and management and preventive measures like indoor residual spray (IRS) in development projects and impregnation of existing bed nets in epidemic prone areas. One malaria epidemic has been

reported in Ponnakyune Township of Rakhine State in December, 2008. Total population of 5443 (984 households) in 5 villages were affected and 503 cases and 1 death were reported. As epidemic response, IRS was carried out with 402 kg of Malathion 50% EC. 530 structures were sprayed and population covered was 3098. 997 existing nets were treated with insecticide tablets and popualtion covered was 5443.

3. Early diagnosis and appropriate treatment

In 2008, according to the new anti-malarial treatment policy, case management with ACT (Artemisinine based combination therapy) was practiced in all 325 townships. For malaria diagnosis, 700 microscopes were distributed up to rural health center level and RDT (Rapid Diagnostic Test) were also distributed up to sub-center level. RDT (419,450) tests and 231,997 doses of ACT (Coartem) were distributed to BHS of those all 325 townships in 2008. Malaria mobile teams reached up to rural areas and hard-to reach border areas for improving access to quality diagnosis and effective treatment. Assessment and quality control of malaria microscopy was done by laboratory technicians from Central and State/Divisional VBDC team in 2008. Monitoring therapeutic efficacy of antimalarial drugs particularly ACTs and quality assurance of RDT (Paracheck) were also done in collaboration with DMRs. In year 2008, Community based Malaria Control Program has been introduced and implemented in some selected townships of Eastern Shan State and Tanintharyi Division with the aim of improving access to quality diagnosis and effective treatment in remote areas. Quality assurance of antimalarial drugs is an important issue in reducing malaria mortality and morbidity. Samples of different types of antimalarial drugs from each and every State/ Division were collected by respective VBDC teams and those samples were sent to the Mini-lab of VBDC office for detection of faked antimalarial drugs.

Malaria Mobile Team

4. Capacity building

Different categories of health staff were trained on different technical areas. Different categories of BHS (44 BHS) were trained on malaria microscopy as new microscopists. Refresher training on malaria microscopy was conducted for 39 trained microscopists. Different categories of 60 VBDC staff working at district level were trained on Basic Malariology and Field Operation.

Tuberculosis

Tuberculosis (TB) is one of the major public health problems in Myanmar and considered as the priority disease in the National Health Plan (2006-2011). Myanmar is one of the 22 high burden TB and 27 high MDR-TB burden countries in the world. Recent estimates suggest that 1.5% of the population become infected with tuberculosis every year, out of which about 130,000 people progress to develop tuberculosis. Half of those cases are infectious with positive sputum smears, spreading the disease in the community.

TB mainly affects the most productive age group of (15-54) years. Multi Drug Resistant (MDR) TB among new smear positive TB cases and previously treated TB cases respectively were 4% and 15.5% (Nationwide drug resistant survey 2002-2003), 4.2% and 10% (Nationwide drug resistant survey 2007-2008). HIV positive cases among new TB cases were (2.6%)(Global TB report 2008) and 10.9% (in 10 sentinel site in 2008) and 60-80% of AIDS patients had TB.

The overall goal of the National Tuberculosis Programme (NTP) is to reduce morbidity, mortality and transmission of TB until it is no longer a public health problem and to prevent the development of drug resistant TB.

Specific objectives are set towards achieving the Millennium Development Goals (MDGs) and by the World Health Assembly (WHA) and Stop TB Partnership.

- To halt and reverse incidence by 2015 and to halve prevalence and death rates by 2015 Compared with 1990. (Impact targets, MDG 6 Target 8, Indicator 23)
- To detect at least 70% of new smear-positive cases and successfully treat at least 85% of these detected cases (Outcome targets, MDG 6, Target 8, Indicator 24)

NTP had implemented "Directly Observed Treatment, Short Course" (DOTS) strategy since 1997. The DOTS strategy has been extended to "STOP TB STRATEGY" which was launched by WHO in 2006 aiming to achieve MDGs. STOP TB STRATEGY covers the following six principal components:

1. Pursue high quality DOTS expansion and enhancement
2. Address TB/HIV, MDR-TB and other special challenges
3. Contribute to health system strengthening
4. Engage all health care providers
5. Empower people with TB and communities
6. Enable and promote research

The National Tuberculosis Control Programme activities are:

- Intensification of health education activities by using multi-media to increase community awareness about TB
- BCG immunization to all under one year children
- Implementation of Directly Observed Treatment (DOT) to all TB cases including TB/HIV cases and planning to involve MDR-TB cases down to the grass root level.

- Early case detection in health facilities with quality-assured bacteriological services and contact tracing
- Regular supervision and monitoring of NTP activities at all levels
- Strengthening partnership
- Capacity building
- Promotion of operational research

Contact tracing during Initial Home Visit

Directly Observed Treatment Short Course (DOTS) strategy was introduced in 1997 and gradually expended during (1997-2003). In 2003, it covered all 325 townships. NTP introduced Fixed Dose Combination (FDC) tablets for daily regimen in 2004 and pre packed patient kit are using in some pilot townships in 2007.

Myanmar has been able to provide DOTS to cover all townships (100%) with technical and financial support from the Government, WHO, Global Drug Facility (GDF), Japan Anti-TB Association (JATA), Japan International Co-operation Agency (JICA), Major Infectious Disease Control Project, and International Union Against Tuberculosis and Lung Disease (Union), Central Emergency Response Fund (CERF) and 3 Diseases Fund (3DF).

Global Drug Facility (GDF) supported anti-TB drugs since 2002, 3 Years Grant for Two times and extra one year grant for Year 2009.Paediatric formulation (3-Year grant) will be supported by UNITAID through GDF after development of childhood TB guideline in 2007.

The basic health staff in the rural areas, voluntary health workers and national NGOs, Myanmar Women Affairs Federation (MWAF), Myanmar Maternal and Child Welfare Association (MMCWA) and Myanmar Red Cross Society (MRCS) whose membership extends down to the grass roots level, have been mobilized to deliver DOT to tuberculosis patients.

Decentralization of sputum microscopy and establishment of sputum collection points in some hard to reach area were done to improve case finding. In Magwe and Sagaing Division aiming to improve case finding and accessibility of hard to reach areas (reaching the un-reached) Central Emergency Response Fund (CERF) project with the technical support of WHO was implemented.

Although the 70% of population are residing in rural area, NTP could treat 60% of registered patients as rural residential. NTP conducted TB Prevalence Survey at Yangon Division and reset target areas in 2006. The nation-wide TB prevalence survey will be conducted in 2009 to evaluate the effectiveness of TB control activities after implementation of "Stop TB strategy".

TB, HIV/AIDS prevention and control activities have been coordinated especially in the areas of mutual concern. In Mandalay, the "Integrated HIV Care for TB patients" project (IHC project) started in collaboration with National AIDS Programme and Union in 2005. IHC project provides voluntary confidential HIV counseling and testing service at TB clinic and TB hospital (Mandalay)

and put 1200 TB/HIV co-infected patients on Anti-retro viral therapy (ART) by the end of 2008. IHC project was expanded to Pakokku in 2008 and 22 TB/HIV co-infected patients were treated with ART.

"Public-Private Mix (PPM) DOTS" project was initiated in 2002 and it covers about 100 townships. Public-Public Mix (PPM) DOTS Project has been implemented since 2007 in 4 teaching hospitals in Yangon (New Yangon General Hospital, East Yangon General Hospital, West Yangon general Hospital and Thingungyun Sanpya Hospital). Myanmar Medical Association is also conducting PPM-DOTS with 588 (PPs) in 23 townships for improvement of TB suspect referral, case finding and case management. Population Services International (PSI) is one of the implementing partners of NTP and has trained 495 Private practitioners (PPs) on TB control strategies in 99 townships (2008).

NTP developed the Five-year National Strategic Plan (2006-2010) in June 2005. 3DF bridging fund covered the transitional period following GFATM termination and initiation of 3DF funded activities in 2007. 3DF funded activities start in February, 2008. Management of multi-drug resistant TB is one of the activities under 3DF. MDR-TB prevention, control and care is one of the integral part of 5 Year National TB Strategic Plan (2006-2010). National Drug Resistant (DR) Committee was organized and formed in September 2006, National frame work on management of DRTB workshop was held in November 2006, National guidelines for Management of DRTB in March 2007 and operational procedures for MDRTB management in the 2 DOTS Plus pilot sites (Yangon and Mandalay)was approved in June 2007. Green Light Committee (GLC) application for 2nd line Anti-TB Drug was approved in November 2007. Ward for 20 MDRTB patients was constructed in Aung San TB Hospital with support of AZG (Holland) and prepared for infection control and laboratory upgrading in 2 pilot DOTS-Plus sites in 2008. DOTS-Plus project will start in March 2009.

Finding of TB patients in Nagis affected areas by Public Health Mobile Team

Researches on TB

Prevalence Survey (Yangon, 2006), and KAP survey were done and all the research papers were disseminated internationally and in the country.

NTP, Myanmar reached the global TB control targets in 2006 and 2007 however sustainability of the current achievement mainly rely on the uninterrupted quality first line anti-TB drugs and the feasibility to tackle TB/HIV and MDR-TB.

Progress of National Tuberculosis Control Programme (Myanmar)

Indicators	1994	2000	2001	2002	2003	2004	2005	2006	2007
DOTS Covered Population (%)	8	85	90	95	95	95	95	95	95
DOTS Covered Township (%)	6	71	80	95	100	100	100	100	100
Case Detection Rate (%)	32	56	61	70	73	81	95	86	89
Cure Rate (%)	61	70	73	74	72	75	78	78	Result pending
Treatment Success Rate (%)	78	81	82	82	81	84	85	85	Result pending

Partner meeting on Sustainable TB Drug Supply
Nay Pyi Taw (December 2008)

Immunization Programme

The EPI in Myanmar was launched in 1978, when BCG, DPT and TT vaccines were introduced in a phased manner across the country. Measles and polio vaccines were introduced into routine EPI program for infants in 1987. School immunization was initiated in 1978 with 2 doses of DT vaccines at kindergarten and 2 doses of BCG at kindergarten and 4th grade as booster doses. However, to accelerate the achievement of Universal Child Immunization 1990 for infants, school immunization was stopped. A concerted effort to improve the coverage in border and disputed areas had been made since 1993. Hepatitis B was introduced in Myanmar with the support of GAVI. It was introduced in phases from 2003 and covering the whole country in 2005. A combination of fixed, outreach and crash immunization delivery systems were used to achieve the nation-wide coverage.

In addition to routine immunization activities outlined above, supplementary immunization activities such as National Immunization Days and Mop-Up for polio eradication, measles control and maternal and neonatal tetanus elimination were undertaken.

Maternal and neonatal tetanus elimination program was started in 1999 in Myanmar. High risk townships were identified using a set of indicators and childbearing age women were given 3 doses of TT through campaign approach.

Three years of measles campaigns took place in 2002-2004 in phases, covering one third of the country each year.

The central EPI (CEPI) and Central Epidemiology Unit of the Department of Health are responsible for formulation and development for planning, management of vaccine and cold chain, supplies and logistics, surveillance and outbreak management of vaccine preventable diseases, training, supervision, monitoring and evaluation.

CEPI and CEU of the DoH, WHO and UNICEF collaborate closely in implementing priority vaccine preventable diseases control activities. While immunization is an important strategy for disease control and mortality reduction in its own right, it is also a proven cost effective intervention yielding broad benefits to both mother and children. Completing a child's immunization series in a timely manner requires that the child and most often, the mother be seen by a health care provider usually midwife in Myanmar at least 4-5 times during the first year of life. This repeated contact with the health care system provides opportunities for general health screening and provision of timely health information and advice. For this reason, EPI program is considered to be a "Cutting Edge" for improving child and maternal health care.

The EPI is administered by central level staff assigned for EPI program and working through state/divisional counterparts, heads of township health departments and other public health staff at township, RHC and Sub-RHC levels. Vaccination is delivered through a combination approaches of fixed and outreach sessions. Limited electric power, low rate of urbanization, staff

vacancies at all level, lack of transport and difficult access mean that it is usually impossible to immunize the infants on a monthly basis.

Routine immunizations are delivered in fixed sites at Maternal and Child Heath Center (MCH) and Urban Health Centers in towns and at RHCs in country sides. Majority of immunization services are provided through outreach activities in wards and villages. In some townships, a special program called crash program is implemented where 3-4 times of immunization services provided to less than 3 years children within a year during "open" or in other words "favourable" season in some part of the township or in entire township where the accessibility is an issue. Eight townships in Kachin and 3 townships Sagaing rely totally on crash immunization strategy in providing immunization services. During 2005, 41 townships from 11 States/Divisions carried out crash program in hard to reach area within the townships.

On-site supervision for the immunization activities of peripheral basic health staff by qualified township level staff is limited. There was also limited regular monitoring and feedback system at all levels.

Immunization Schedule

Community		Birth Dose for Hospital Deliveries	
Age	Antigen	Age	Antigen
		Birth dose (0-7 Days)	BCG, Hep B1
At 6 weeks	BCG, DPT1, OPV1, Hep B1	At 6 weeks	DPT1, OPV1, Hep B2
At 10 weeks	DPT2, OPV2, Hep B2	At 10 weeks	DPT2, OPV2
At 14 Weeks	DPT3, OPV3, Hep B3	At 14 Weeks	DPT3, OPV3, Hep B3
At 9 months	Measles 1	At 9 months	Measles 1
At 18 months	Measles 2	At 18 months	Measles 2

Immunization Schedule for Pregnant Women - 1st dose of TT at first AN check up and 2nd dose TT at 4 weeks interval.

Polio Eradication Measures in 2008

With strong political commitment and massive community involvement, polio eradication is carried out in line with the following strategies-

(1) Routine OPV Immunization to achieve high coverage throughout the country.

(2) Conducting National Immunization Days (NIDs) and Sub National Immunization Days (SNIDs). Myanmar has conducted 8 times of National Immunization Days and 5 times of Sub- National Immunization Days (SNIDs).

(3) Conducting Mopping up Immunization to wild polio virus transmitted areas and high risk areas.

(4) High quality Acute Flaccid Paralysis (AFP) surveillance.

In Myanmar, the last case of wild poliovirus was detected on 13th February, 2000 and WHO has certified Polio Eradication in Myanmar on 13th February, 2003.

The Union of Myanmar`s 6 years long polio free status has been interrupted by the report of an outbreak of 11 cases of wild-polio virus in Maungdaw and Buthidaung townships of Rakhine State in the months of March, April and May, 2007.

The country conducted 3 rounds of polio mop-up and Sub National Immunization Days in 87 townships covering the outbreak area and adjacent areas to rapidly stop the wild poilo virus transmission. Furthermore, two rounds of National Immunization Days for poilo eradication campaign was conducted all over the country in November and December 2007 with the coverage of 98% and 97% targeting 7.2 million children of 0-5 years of age.

One round of Mopping up Polio Immunization was conducted in 80 Townships in Yangon, Bago (East), Mon, Kayin and Rakhine from 25 to 29 February, 2008 with the coverage of 99.42% targeting 1.8 million children of 0-5 years of age.

National Immunization Days (2009) in Myanmar

Minister and Deputy Ministers for Health opening the Launching Ceremony of the National Immunization Days (2009) in Nay Pyi Taw Pyinmana, 10th January 2009

In 2008, neither more wild polio viruses nor vaccine derived polio viruses were detected through AFP surveillance. According to polio eradication strategies, National Immunization Days for all of under 5-year-old children who are living throughout Myanmar are conducted from January 10 to 12, 2009 for the first round and from February 7 to 9, 2009 for the second round.

Trivalent OPV was used in National Immunization Days (2009), the achievement were 99.99% for the first round and 99.92% for the second round for the 7.23 million children in the age group 0-59 months.

Professor Dr. Kyaw Myint, Minister for Health
giving Oral Polio Vaccine at the National Launching Ceremony of NIDs

Professor Dr. Mya Oo, Deputy Minister for Health
giving Oral Polio Vaccine at the
National Launching Ceremony of NIDs

Professor Dr. Paing Soe, Deputy Minister for Health
giving Oral Polio Vaccine at the
National Launching Ceremony of NIDs

Measles Control Strategies in Myanmar

- Providing the first and second doses of measles vaccines to all children of 9 months and 18 months of age in Routine Immunization.
- Ensuring that all children have a Second Opportunity for measles vaccination.
- Strengthening measles surveillance and measles laboratory.
- Improve measles case management.

Routine measles immunization for 9-month old children in EPI has been started since 1987. Currently, EPI of Myanmar is immunizing 1.3 million of children under1 year of age with measles vaccine every year. It is planned to conduct follow-up measles immunization for under 5- year-old children in periodic manner i.e; every 3 to 4 years and the simultaneous introduction of two-dose strategy for measles immunization in routine EPI.

In January, March and May 2007, Comprehensive Strategies Package for Measles Control (CSPMC) including measles catch-up campaign targeting 6 million children was conducted through-out the country and 5.7 million of the children of the age of 9 months to 5 years could be immunized against measles.
In early months of 2008, post-CSPMC strategies were conducted;

(a) Providing second opportunity dose of measles vaccination for nearly 0.6 million children of 18-24 months age in 256 townships that achieved > 60% coverage in CSPMC

(b) Conducting Mass Measles Campaign in low CSPMC (<60%) coverage townships (65+5=70 Townships)

(c) Providing measles vaccination in combination with Crash Program in selected townships (82 Tsps)

(d) Strengthening measles case-based surveillance and case management.

Maternal and Neonatal Tetanus Elimination Program in Myanmar

National Plan of Action for Maternal and Neonatal Tetanus Elimination was developed. Supplementary Immunization Activities for women of child-bearing age (15-45 years) has been implemented since 1999. Total of 220 townships were selected by high risk approach from 1999 to 2006 and 3 doses of TT were given. The goal of this plan is to eliminate maternal and neonatal tetanus as a public health problem by the year 2008; that is to reduce the incidence of neonatal tetanus case in every district.

In 2008 another 87 High Risk Townships are selected and one round of Tetanus Toxoid immunization was conducted for 60 Townships. and 3rounds of Tetanus Toxoid immunization was conducted for 27 Townships in February , March and October 2008 targeting 2.6 millions of Women of Child bearing age. Validation state was reviewed for Maternal and Neonatal Tetanus Elimination in late 2008 and MNT Elimination target will be achieved in late 2009 after conducting one corrective round of Tetanus Toxoid supplementary immunization in 7 Townships of 3 States/ Divisions.

Sustaining Achievements

Leprosy

Myanmar has achieved Leprosy Elimination Goal six years back since 2003. Following elimination National Leprosy Control Programme has sustained the momentum of leprosy control activities focusing on further reducing the leprosy burden and preventing disabilities and rehabilitation in accord with National Guide-line for Leprosy Control which was based on WHO Global Strategy.

Professor Dr. Kyaw Myint, Minister for Health, and Professor Dr. Mya Oo, Deputy Minister for Health, inspecting the exhibition at the 6th Leprosy Elimination Commemorative Day, 2009

Since 1991 MDT services has been integrated into Basic Health Services. Case-finding activities and treatment with MDT are being carried out with quality care by Basic Health Staff with the technical support of leprosy specialized staff. **"Sustain Leprosy Control Activities: Let's continue our efforts"** was defined as the slogan to honour the Fifth Leprosy Elimination Commemorative Day (2008). Throughout the country 3313 new cases were detected and treated with MDT during 2008. As community awareness become increased, about 80% of new cases was detected by voluntary reporting. In the areas where leprosy prevalence was previously high ideal mass survey activities were carried out as active case-finding.

Since achieving the leprosy elimination, the programme emphasized more on prevention of disability and rehabilitation. Up-to the end of the year 2008 prevention of disability activities (POD) are being carried out in 77 townships with regular case assessment, training for self-care and provision of necessary aids for disability such as footwear, sunglasses and POD kits. POD activities will be expanded in 20 townships annually.

Activities implemented in 2008

- Sustaining political commitment
- Community awareness raising activities including printed and electronic medias
- Meetings for planning, implementation and evaluation for leprosy control activities
- Partners Meeting for Myanmar Leprosy Control Programme
- Capacity building on sustaining leprosy control services and POD activities for basic health and leprosy specialized staff
- Research activities including basic and applied researches

Participation of leprosy control staff in health care activities at Nargis affected areas

Achievement and Current Situation

Indicators	2006	2006	2006
New Cases detected and treated	3573	3637	3383
Cases release from treatment (during the year)	3621	3441	3444
Cases of released from treatment (cumulative)	267,278	270,719	274,163

Eye care activity at Yenanthar Leprosy Hospital

Training on prevention of disability activities for basic health staff

Basic Health Staff practicing for Prevention of Disability activity

Trachoma Control and Prevention of Blindness

Trachoma Control and Prevention of Blindness project was launched in 1964. At that time trachoma was main cause of blindness in Myanmar and active trachoma rate was 43 % in trachoma endemic areas (Central Myanmar). With the concerted effort of the project and support of Government, WHO, UNICEF and I NGOs , active trachoma rate was reduced to under 1 % in 2000. As trachoma blindness is greatly reduced, cataract becomes main cause of blindness in the country.

According to 1998 ocular morbidity survey, blindness rate is 0.6 % and main causes of blindness are-

Main Causes	Percent (%)
Cataract	63
Glaucoma	16
Posterior segment diseases	7
Trachoma	4
Corneal opacity	3
Trauma	1
Others	6

WHO has laid down the strategy "Vision 2020, the Right to Sight: Elimination of avoidable blindness" and Myanmar Prevention of Blindness project is trying the best to fight against avoidable blindness.

Prevention of Blindness project has 16 secondary eye centers in Mandalay, Magway, Sagaing (lower part) and Bago (east) divisions headed by ophthalmologists with field staff. The project is covering 18.1 million people in 79 townships of those 4 divisions.

National Objective

- To reduce blindness rate to less than 0.5%.

Strategies

- Improving cataract surgical rate and quality of surgery.
- Making Primary Eye Care available to all BHS and eliminating the avoidable blindness.
- Promoting community participation in prevention of blindness.
- Provision of cataract surgical services at affordable price and free services to poor patients.
- Provision of outreach services

Services Provided by the Project

Type	Activities
Promotive (Government)	❁ Greening of Central Myanmar ❁ Improving water supply
Preventive	❁ Village and school eye health services by field staff and ophthalmologist ❁ Tetracycline eye ointments for trachoma patients, trichiasis surgery at field and referral of other eye diseases
Curative	❁ Medical and surgical services at secondary eye centres and fields ❁ Outreach cataract surgery
Training	❁ Primary Eye Care Training to basic and voluntary health workers and NGOs (550 BHS were trained in 2008)
National Eye banks (Yangon and Mandalay)	❁ Collection of donated cornea, quality control and distribution of corneal tissue.
Operational Research	❁ Rapid assessments of trachoma were done in three district (Chauk, Myingun and Kyaukpadaung) to identify pocket area and for elimination of trachoma.
Low cost Eye drop Production	❁ Low cost eye drop production unit at Prevention of Blindness Programme Region (3) Meikhtila, supported by Christoffel-Blinden Mission.

Provision of outreach services for Eye Health

Professor Dr. Kyaw Myint, Minister for Health
encouraging the patients at outreach eye care services

Accomplishments in 2007

Cataract surgery	32371
Glaucoma surgery	3687
Other major surgery	720
Other minor surgery	17594
Trichiasis surgery	3365
No. of eye drop bottles produced	42500
Free of Charge Cataract Surgery	7950
No. of villages examined	1882
No. of population examined	1079257
No. of schools examined	878
No. of students examined	175470

Health in Natural Disaster

The Cyclone Nargis the gravest natural disaster experienced in its history hit Myanmar on the 2nd May 2008. The country suffered devastating loss of lives and properties in the Ayeyawaddy and Yangon Divisions hit by the storm. The magnitude of injuries, loss of lives, loss of properties both state and private properties was unprecedented.

The government declared the (47) townships affected as the Areas under Natural Disaster and immediately responded with rescue and relief works. Sub-committees of the National Disaster Preparedness and Management Committee which had been formed since 2005 set base at the storm-hit areas and worked with full force on rescue, relief and rehabilitation efforts. With the collaborative and coordinative efforts of the international and national organizations and the continuous support of well-wishers in cash and kind, the government had been able to provide medical service to the storm-victims. No disease outbreaks had occurred. The storm-victims were also provided with mental health services, social and moral support. Relief supplies were distributed with increasing momentum and international relief supplies were also distributed without delay to the affected people.

The emergency relief, rehabilitation and reconstruction tasks were smooth and successful, due to the government-aided funds, donations of the people in the country, cooperation of the local companies and international relief aids.

Efforts had been also made to provide safe water supply and ponds, chlorination of wells, supply of chlorine tablets and safe drinking water along with construct sanitary latrines, controlling vector and other public health activities in collaboration with civil societies such as Myanmar Red Cross Society.

Head of State Senior General Than Shwe went to the storm-hit areas to supervise the rescue, relief and rehabilitative efforts being implemented. In providing encouragement and guidance the Senior General stated that "When all the relief, rehabilitative, development and preventive efforts have been completed, the storm-hit areas will become the most comprehensively developed area in terms of economy, education, health and communication; we will replace stone bricks for the earth bricks that had fallen and build new lives and create new situation".

The National Natural Disaster Preparedness and Management Central Committee chaired by His Excellency the Prime Minister, comprises (10) sub-committees of which Health subcommittee is chaired by the Minister of Health with Deputy Minister of Health as the secretary. Ministry of Health has also developed Health Care Management Plan and Mass Causality Management Plan of all hospitals. Training, Drills and Table Top Exercises were conducted in all Hospitals and BHS from All Disaster High Risk Areas to get stand by position of Disaster Preparedness and Management.

As immediate Response to the Cyclone, Two central teams, Central Assessment and Investigation team and Central Logistics and Supply Team were formed promptly following the cyclone. Ministry of Health could provide emergency management without delay by organizing and sending search and rescue teams to the disaster affected areas, opening the mobile camps and clinics at the village level, provision of medical supplies and equipments, continuous supportive provision of medical supplies and equipments together with Public Health measures including prevention and control of infectious diseases.

Provision of health care by specialist team in cyclone affected area

Provision of health care by mobile floating medical teams

The Ministry of Health had taken the efforts to avoid the unnecessary death by providing the effective medical care and prevention and control of disease outbreaks. For better management of health care activities, (12) front line relief camps were formed in Pyinkayaing, Thingangyi, Saluseik, Theikpankonegyi, Pyinsalu, Hlaingphone, Polaung, Kwinpauk, Kyeinchaung, Kyonedar, Setsan and Kadonkani, (6)intermediate camps in Hainggyi, Labutta, Mawlamyaingkyun, Bogale, Pyapon and Dedaye and (3)rear camps were formed in Myaungmya, Wakema and Maubin from Ayeyarwaddy Division.

Public Health professionals together with health education personnels, health assistants and environmental sanitation engineers were sent to the relief camps and provided prevention and control of Epidemic prone diseases and other communicable diseases.

Emphasis has been given on measures to control water-borne diseases (Diarrhoea, VH) and vector-borne disease (DHF, Malaria) by daily surveillance, preparedness and response.

Disease control and surveillance activities were augmented by the WHO which had provided (12) vehicles with Regional Surveillance Officers.

By the guidance of the National Disaster Management Committee and as a result of provision of prompt continuous medical care by Health Care Sub-committee with different sources of medical teams from the Ministry of Health, health situation of the people in the cyclone-hit regions is improving day by day without any serious complications and disease outbreak.

Conducting EPI Plus activities in cyclone affected area, Ayeyarwady Division

MANAGING HEALTH WORK FORCE

Under the leadership of the Ministry of Health, the Department of Medical Science is responsible for training and producing all categories of human resources for health in accordance with the needs of the country. There are a total of 14 medical and health related universities under the management of the Department of Medical Science. It also had 46 nursing and midwifery and related training schools across the country.

The appropriate mix of different categories of health professional is being produced from universities and training schools under the Department of Medical Science. Motivated and accountable Basic Health Staff are also produced who go into service as community leaders.

In addition, postgraduate training courses are being conducted for higher learning and these are 30 Doctorate courses, 7 Ph.D courses, 29 Master courses and 6 Diploma courses conducted under the Department of Medical Sciences.

To produce efficient human resources for health, all health professional curricula have been reviewed, revised and update for relevance to the health needs, competency needs and training needs by conducting Medical Education Seminar periodically since 1964. In 2008, 7th Medical Education Seminar was conducted under the guidance of the Ministry of Health. The seminar had highlighted the introduction of family medicine concept and ethical contents in undergraduate teaching.

University/ Training School	No. of Intake each Year
University of Medicine	2400
University of Dental Medicine	300
University of Pharmacy	300
University of Medical technology	300
University of Nursing	300
University of Community Health	180
Nursing Training Schools	1200
Midwifery Training Schools	1050

Midwifes, lady health visitors, public health supervisor I and II are basic health front line workers in the essence of primary health care system practiced in Myanmar. These workers are the corner stone for successful implementation of rural health development programme. Regionally administered workshops and training sessions are regularly given to these workers for updating their technical know-how and work process such as report and returns in electronic form, procedure about prevention of avian flu infection etc.

Township health assistants, health assistant grade (1) and health assistants from different regions have been yearly trained on improving managerial as well as technical skill.

Basic health staffs and voluntary health workers, who performed their duties outstandingly from different regions of the country, were selected yearly in recognition of their efforts in providing health services. Study tours are arranged for outstanding staffs so that they can share their experiences with fellow workers and have the opportunities to learn the progress taking place in different regions.

Following orientation and introduction to concepts of Management Effectiveness Programme (MEP), sequential training on modules covering training of trainers for facilitation, continuous personal and professional development and team building and leadership are provided to basic health staff of the project townships.

As a result of training basic health staff together with the community will be able to identify their health problems and find out the solutions through MEP approach in their work places.

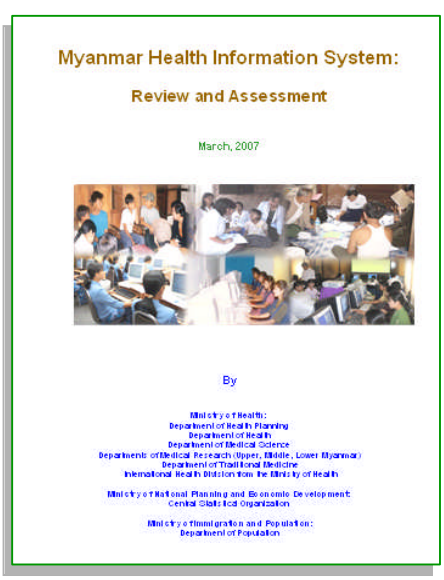
Study Tour for Outstanding Basic Health Staffs and
Voluntary Health Workers

EVIDENCE FOR DECISION

Health Information Services

To fulfill the need of integrated national health information system ensuring timely, reliable and accurate information based on minimal essential data set, the Health Management Information System (HMIS) was established in 1995. The new HMIS could replace the existing practice of data collection based on the information needs of the fragmented vertical health programmes. The main objectives are to ensure minimum essential information of prioritized health projects are integrated in the national health information system, to generate and report health information in the course of implementation of the National Health Plans for timely and effective monitoring and evaluation and to reduce the data collection burden for basic health staff. HMIS includes community based as well as institutional based information as a means to support making evidence based decisions in policy design, planning and management so as to improve overall health system performance. HMIS is now in the process of further development by establishing computer networking (e-Health System) in all states and divisions with support of the WHO.

Hospital reporting is another facet of health information service well established through monthly collection of hospital morbidity and administrative information from public hospitals. Morbidity information which is individual case summaries with analysis of all discharges and deaths is processed at the central office (Department of Health Planning). The medical record services have been established in most hospitals and training programme exists for medical record officers. By using (ICD 10) for disease coding, data entry, processing and analysis international comparison is facilitated. Computerized medical record system has been established in some major hospitals since 2000 and to be further expanded.



To further strengthen the health information system, ICT Centre has been established in the Ministry of Health. This will enable extension of information network and rapid and smooth flow of information. A web site has also been established in the Ministry of Health providing updated information on health activities and achievements and also the opportunity to search health literatures.

Following the launching of Health Matrix Network (HMN) at the World Health Assembly in 2005, Myanmar joined the international effort for strengthening health information system in the country.

As part of HMN activities, assessment of current health information system has been conducted in the Ministry involving stake holders. Findings of the assessment will be used as inputs for developing comprehensive plan for strengthening National Health Information System.

Health Research

Department of Medical Research (Lower Myanmar) carried out extensive research in malaria, diarrhoea, anaemia, iodine deficiency disorders, snake bite, viral hepatitis and intestinal helthminthiasis. The findings have contributed to the diagnosis, management, prevention and control of these health problems.

Research programmes are mainly focused on six major diseases namely, malaria, tuberculosis, HIV/AIDS, diarrhoea and dysentery, diabetes and hypertension as well as on application of traditional medicines in treatment of several illnesses. Quality control and evaluation of available malaria rapid diagnostic tests, therapeutic efficacy testing of different artemisinin combinations on falciparum malaria, different epidemiological, immunological and molecular studies of drug resistant malaria, drug resistant tuberculosis, leprosy, dengue, HIV/AIDS, avian influenza, hepatitis B and C are the leading projects. The findings and evidences came out from these are being disseminated for the effective utilization in management and control programmes of respective diseases. Acute toxicity testing of various traditional medicinal plants, extracts and formulation; screening of these for Pharmacological activity; screening and identification of unknown Drugs, Chemicals and Biological poisonings, by using hi-tech equipments and methods such as High Performance Liquid Chromatography (HPLC), Gas Chromatography Mass Spectrometry (GCMS) and Gas Chromatography (GC); gender verification by Barr body examination; chromosomal abnormalities of human and animals; studies on thalassaemias, haemoglobinopathies, blood and coagulation disorders and tumour markers (for liver, bladder and cervix) are the research based services that the Department is giving to the public.

With the establishment of new departments of medical research in upper and middle parts of the country, more researches, particularly focusing on Traditional Medicine could be done. A herbal garden established in the Department of Medical Research (Upper Myanmar) could nurture over 300 species of herbal and medicinal plants from all over the country. Up to 9000 herbal and medicinal plants are now being grown by the department. The department could also study effects of these plants on treating malaria, diabetes mellitus, hypertension and diarrhoea diseases in collaboration with Department of Traditional Medicine, Department of Phamacology of the Mandalay Medical University and Mandalay University of Pharmacy. Moreover, basic, applied and health systems research are being carried out in collaboration with 200 bedded Hospital (Pyin Oo Lwin), Children Hospital, Central Women's Hospital, University of Medicine, University of Pharmacy, Vector Borne Disease Control Programme, National Tuberculosis Programme, Public Health Laboratory in Mandalay.

Current research activities undertaken in Department of Medical Research (Central Myanmar) cover both basic, applied and health systems research. They include therapeutic efficacy of anti-malarial drugs combination, and traditional anti-malarial drug. Behavioural studies relating to common communicable diseases like DHF and TB are also in the list. Study on therapeutic efficacy of traditional medicine formulation and plants on non-communicable diseases particularly diabetes mellitus and communicable diseases are also in progress.

Moreover, the Department of Health Planning, the Department of Health, the Department of Medical Science and the Department of Traditional Medicine are also implementing research activities in addition to their principal functions. Two main types of applied research, monitoring and evaluation (M&E) research and health systems research are conducted by the Department of Health Planning.

Health Systems Research Methodology trainings are conducted for post-graduate students in the medical universities in Yangon and Mandalay and for in-service health staff from states and divisions. Goals, functions and concepts of health systems are also disseminated among township health committees. User friendly health systems research tools are also to be developed to conduct health systems research studies.

Community Based Verification of Causes of Death Study in Pyinmanar Township was conducted as second year pilot project during 2008 with the support of WHO as one of the Health System Research activities. The project aimed to develop a sample vital registration system by using verbal autopsy method in order to strengthen mortality statistics in Myanmar. Data obtained from the project such as life expectancy at birth, age specific death rates, infant mortality rate, under-five mortality rate and causes of death information support data for calculation of burden of disease estimates for the Township. Based on the experiences obtained from this project, a system of collecting vital data including cause of death information is intended to expend other townships form each State and Division in phase manner during coming years.

Research unit under the Department of Traditional Medicine is also conducting studies to assess safety, efficacy and quality of Traditional Medicine. In collaboration with Medical Research Departments, research activities to explore new traditional medicine to treat six common diseases namely diarrhoea, dysentery, malaria, tuberculosis, hypertension and diabetes mellitus are also being conducted.

In collaboration with the Planning Department from the Ministry of National Planning and Economic Development and UNICEF the Department of Health Planning is also conducting Multiple Indicators Cluster Survey (MICS) 2008-2009. It is a nationwide survey collecting data for assessing the situation of women and children using healthy life indicators including child mortality, nutrition, maternal and child health, immunization, water and sanitation, education, child protection and HIV/AIDS. Up to date knowledge on situation of women and children obtained from the survey will help monitoring and evaluation of MDGs and other goals for women and children.

TRADITIONAL MEDICINE

The Myanmar Traditional Medicine covers profound medical treatises, a variety of potent and effective medicines and a diversity of therapies.

With the aim to extend the scope of health care services for both rural and urban areas, health care by Myanmar Traditional Medicine services is provided through out Myanmar. There are now, two 50 bedded Myanmar Traditional Medicine hospitals, twelve 16 bedded hospitals and 237 district and township clinics and sub-centers. In addition to these public institutions, private Traditional Medicine Practitioners are also taking part in health care provision in townships and hard to reach areas.

In 2007, the Department of Traditional Medicine started to provide household traditional medicine kits for emergency use in three townships as a pilot project. The objective of the project is to provide easy access to common traditional medicine drugs for minor illness especially in rural areas. The kits are handed over to the persons who live in rural area and also who have no access to western medicines. Recovering costs of these medicines is to be accomplished through user charges. The report by evaluation and monitoring team revealed that users benefited from this project as Traditional Medicine is more economical, saves time and relieves minor illnesses. In 2008 the distribution of traditional medicine kits for emergency use was extended to three divisions and one state to cover 644 villages.

Teaching of Traditional Medicine

Myanmar Traditional Medicine is truly an inherited profession whose development has interrelations with the natural and climate condition, thoughts and convictions and the socio-cultural system of Myanmar.

Before 1976, the knowledge of Myanmar Traditional Medicine was handed down from one generation to another. In 1976, with the aim to improve the qualification of traditional medicine practitioners, the institute of Myanmar Traditional Medicine was established and systematic training programmes were introduced to train and produce competent Traditional Medicine Practitioners. A two year course together with one year internship was conducted conferring, a Diploma in Myanmar Traditional Medicine to successful candidates. The yearly intake of students is about 100. The Institute had already produced (2187) diploma holders.

The University of Myanmar Traditional Medicine was established in 2001. Using modern teaching learning methodologies in accordance with the systematic curricula, developed by the joint efforts of Myanmar Traditional practitioners and medical educationists. The curriculum covers all the Traditional Medicine subjects of the four Nayas, basic science and basic concepts of western medicine. It is a four year course together with one year internship. A successful candidate is conferred Bachelor of Myanmar Traditional Medicine. The yearly intake is 175 candidates.

Basic concept of Myanmar Traditional Medicine has been introduced to the curriculum of 3rd year M.B.,B.S. medical students since 2003. A module, comprising 36 hours of teaching and learning sessions of traditional medicine was developed and incorporated together with assessment for completion. A certificate was presented to all successful candidates and the main aim of the course is to familiarize medical students with Myanmar Traditional Medicine. This is the first of its kind where traditional medicine is integrated into western medicine teaching programme in the world. It gives opportunities for medical students to explore the concepts of traditional medicine and paves a venue for interested student to venture into the realms of Myanmar Traditional Medicine at a deeper level.

Manufacturing of Traditional Medicine

The government is giving impetus to developing Traditional Medicine systematically reach international standard and to manufacturing potent and efficacious Traditional Medicine based on scientific evidences and practices.

Traditional Medicines have been manufactured by both public and private sectors. The Department of Traditional Medicine takes responsibility for the public sector and has two Traditional Medicine factories. Medicines are produced according to the national formulary and Good Manufacturing Practices (GMP) standards. In addition, these two factories manufacture twenty one varieties of Traditional Medicine in powder form which are provided free of charge to patients attending public Traditional Medicine facilities, and the factory also produces 12 kinds of drugs in tablets form for commercial purpose.

The private Traditional Medicine industry is also developing and undertaking mass production of potent medicine according to the GMP standard. Some private industries are now exporting traditional medicines which are well accepted.

Due to the encouragement, regulations and assistance of the government and the manufacturing of standard Traditional Medicine through correct and precise methods which complies with international norms of production process, storage system and packaging methods using modern machinery, public trust and confidence in indigenous drugs has greatly been enhanced. There is a progressive increase in demand for traditional medicine not only in rural areas but also in urban areas.

Laws

Traditional Medicine Council Law

The Myanmar Indigenous Medicine Act was enacted in 1953. According to the Act, the State Traditional Medicine Council was formed; it was a leading body and responsible for all the matters relating to Traditional Medicine. To keep abreast with the changing circumstances, the department reviewed and updated the Myanmar Indigenous Medicine Act and transformed it into Myanmar Traditional Medicine Council Law, which was enacted in the year 2000. One of the objectives of the law is "to supervise Traditional Medicine Practitioners for causing abidance by the rule of conduct and discipline". At present, there are about six thousand Traditional Medicine practitioners registered under this law. According to the law, the licenses for practicing are issued to the persons who have diploma in Myanmar Traditional Medicine or Bachelor of Myanmar Traditional Medicine.

Traditional Medicine Drug Law

In 1996, the Government promulgated the Traditional Medicine Drug Law in order to control the production and sale of Traditional Medicine drug systematically. This was followed by the series of notifications concerning registration and licensing, labeling and advertising. One of the objectives of the Traditional Medicine Drugs Law is "to enable the public to consume genuine quality, safe and efficacious traditional drugs". According to the Traditional Medicine Drug Law, all the Traditional Medicine drugs produced in the country have to be registered and the manufacturers must have licenses to produce their products. There are all together (8436) registered items of drugs and (1456) manufacturers have already received the licenses for production at the end of 2006. Practices of good manufacturing are considered before issuing the licenses.

Myanmar Traditional Medicine Practitioners Association

Myanmar Traditional Medicine Practitioners Association has been formed since 2002 to promote unity, harmony and adherence to code of conducts of the Traditional Medicine Practitioners. The objectives of the association are to implement programmes through the work of practitioners well versed in their field, to hold seminars in which the physicians themselves can seek means to revive hidden and extinct subject, therapies and drugs and to unite all the practitioners of the various groups under the banner of Myanmar Traditional Medicine Practitioner Association.

Traditional Medicine Conference

Myanmar Traditional Medicine Practitioners' Conference has been held annually since 2000 in accord with lofty aims for development of Myanmar Traditional Medicine. Every year , Traditional Medicine Practitioners from all over the country assemble at the conference, to exchange knowledge and hold discussions for perpetuation and propagating of Myanmar Traditional Medicine, for the standardize progress of the science providing more effective and broader health care services through the profession.

WHO Congress on Traditional Medicine

Myanmar adopted the Primary Health Care approach since Alma-Ata declaration of in 1978. Since then, Traditional Medicine has been integrated into Primary Health Care through provision of health care services, education, provision and manufacturing of traditional medicine. In 2008 November, WHO Congress on Traditional Medicine was held in Beijing, China and the Declaration of Beijing was successfully laid down and confirmed on the congress. Myanmar has actively participated in the congress.

Herbal Parks and Traditional Medicine Museum

Department of Traditional Medicine has established 9 herbal parks all over the country to cultivate more medicinal plan. There are three department museums, two are in Nay Pyi Taw National Herbal Park, and one is in University of Traditional Medicine, Mandalay. The objective of the museums is to enable the people to observe resources used in Myanmar Traditional Medicine formulation at a single place and to preserve rate and extinct animal origins and aquamarine origins and the endangered species of Myanmar medicinal plants.

Research and Development

In 1980 , Myanmar Traditional Medicine National Formulary has been compiled for 57 numbers of traditional medicine formulations, each monograph included formulary, therapeutic uses, caution and dosage in Myanmar language. These traditional medicines were standardized botanically and physio-chemically and evaluated toxicologically and pharmacologically in the period of 1984-1989. This project has been implemented with the assistance of UNDP/WHO. Five volumes of Myanmar traditional medicine had been published in English and are being used as references and guidelines where and when necessary such as quality control system, health education and the use of traditional medicine formulation in primary health care.

The publication of "Commonly Used Herbal Plants" had been published in series since 1997 and Volume 11 was published in 2008. Moreover, Myanmar Traditional Medicine Handbook was compiled in bilingual for traditional medicine practitioners with the support of JICA and A Manual of Myanmar Traditional Medicine for Primary Health Workers had been compiled not only in Myanmar but also in English language and published with the assistance of WHO for basic health workers and Voluntary Health Workers.

The monograph of 120 Myanmar medicinal plants had been successfully published volumes 1and 2 respectively in 2000 and 2006. These will provide basic information relevant to the use of medicinal plants in primary health care.

HEALTH STATISTICS

Vital Statistics

Health Index	1988	1999	2001	2002	2003	2004	2005	2006
Crude Birth Rate (per 1,000 population)								
- Urban	28.6	24.5	23.9	21.2	19.9	19.1	19.0	19.0
- Rural	30.5	27.1	26.3	24.6	22.4	22.0	21.9	21.5
Crude Death Rate (per 1,000 population)								
- Urban	8.9	6.0	6.2	6.1	5.6	5.5	5.5	5.3
- Rural	9.9	7.8	7.1	7.0	6.5	6.4	6.4	6.3
Infant Mortality Rate (per 1,000 live births)								
- Urban	47.0	55.1▲	48.3	48.4	45.3	45.2	45.1	44.9
- Rural	49.8	62.5▲	50.1	50.7	47.1	47.0	47.0	46.9
U5 Mortality Rate (per 1,000 live births)								
- Union	-	77.77▲	-	-	66.1▲	-	-	-
- Urban	72.9	65.12▲	73.1	72.6	72.2	70.1	70.0	64.15
- Rural	-	85.16▲	73.8	73.5	73.2	71.4	71.2	-
Maternal Mortality Ratio (per 1,000 live births)								
- Union	-	2.5▲	-	-	-	-	3.16▲	-
- Urban	1.0	1.8▲	1.0	1.1	0.98	0.98	0.96	0.96
- Rural	1.9	2.8▲	1.8	1.9	1.52	1.45	1.43	1.41
Population Growth Rate	1.96	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Average Life Expectancy								
- Urban (Male)	59.0	61.0	61.5	61.8	62.1	62.4	62.5	62.9
(Female)	63.2	65.1	65.6	66.0	66.2	66.5	66.6	67.3
- Rural (Male)	56.2	60.3	60.8	61.3	61.5	61.8	62.0	62.5
(Female)	60.4	62.7	63.3	63.8	64.0	64.5	64.9	65.4

Source: *Statistical Year Book, Central Statistical Organization (CSO), 2007*

▲ *National Mortality Survey, CSO, 1999*

▲ *Overall and Cause Specific Under Five Mortality Survey, Ministry of Health/ UNICEF, 2002-2003*

▲ *Nationwide Cause Specific Maternal Mortality Survey, Ministry of Health/ Survey, 2004-2005*

Health Manpower Development

Health Manpower	1988-89	2004-05	2005-06	2006-07	2007-08	2008-09*
Total No. of Doctors	12268	17564	18584	20501	21799	23709
- Public	4377	6473	6941	7250	7976	9593
- Co-operative & Private	7891	11091	11643	13251	13823	14116
Dental Surgeon	857	1365	1594	1732	1867	2305
- Public	328	580	625	707	793	777
- Co-operative & Private	529	785	969	1025	1074	1528
Nurses	8349	18123	19776	21075	22027	22881
Dental Nurses	96	159	162	165	177	244
Health Assistants	1238	1771	1771	1778	1788	1822
Lady Health Visitors	1557	2796	3025	3137	3197	3247
Midwives	8121	16201	16745	17703	18098	18543
Health Supervisor (1)	487	529	529	529	529	529
Health Supervisor (2)	674	1339	1359	1394	1444	1484
Traditional Medicine Practitioners	290	819	819	889	945	950

* *Provisional actual*

Health Facilities Development

Health Facilities	1988-89	2004-05	2005-06	2006-07	2007-08	2008-09*
Government Hospitals	631	824	826	832	839	846
Total No. of Hospital Beds	25309	34654	34920	35544	36949	38249
No. of Primary and Secondary Health Centers	64	86	86	86	86	86
No. of Maternal and Child Health Centers	348	348	348	348	348	348
No. of Rural Health Centers	1337	1456	1456	1463	1473	1481
No. of School Health Teams	80	80	80	80	80	80
No. of Traditional Medicine Hospitals	2	14	14	14	14	14
No. of Traditional Medicine Clinics	89	237	237	237	237	237

* *Provisional actual*

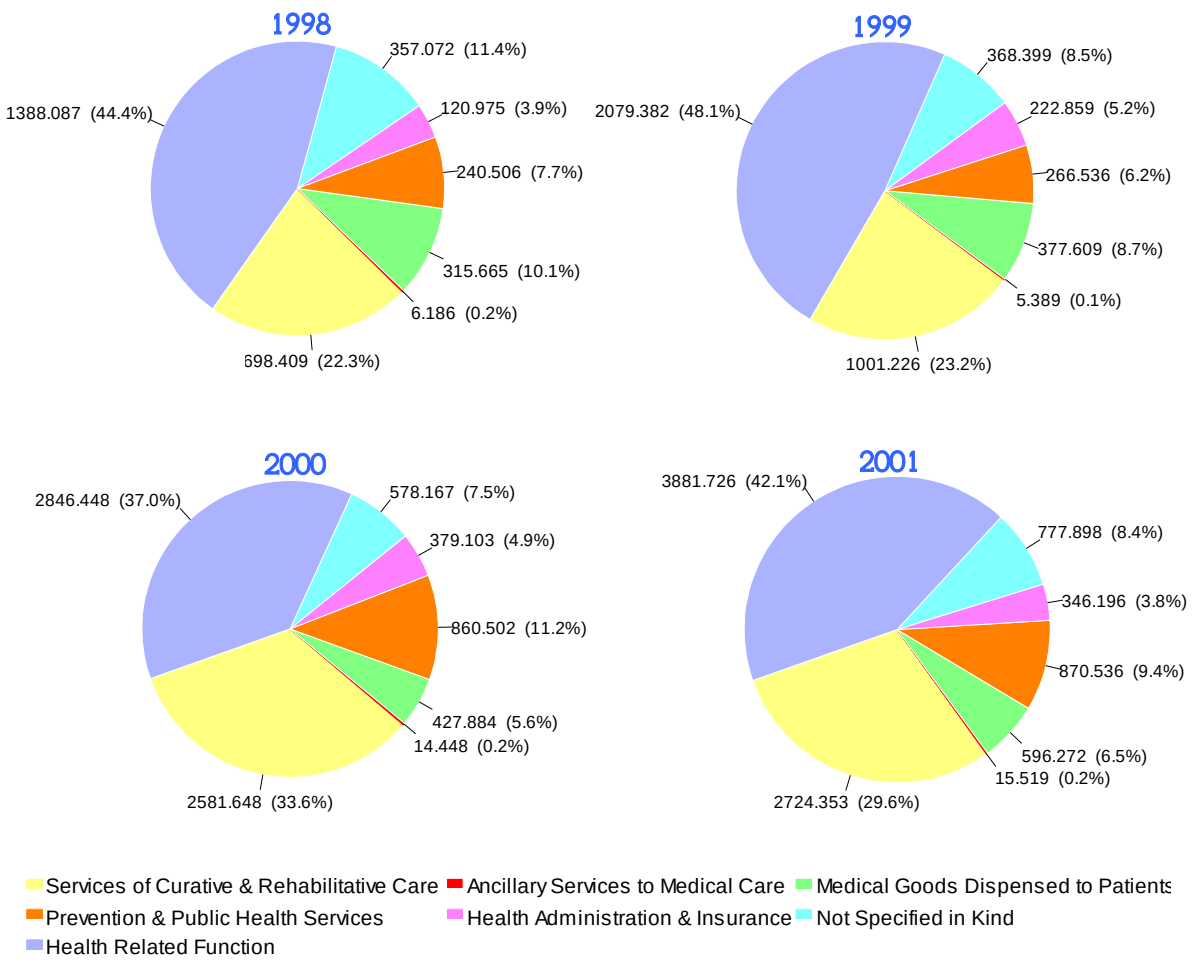
Government Health Expenditure

	1988-1989	2005-2006	2006-2007	2007-2008*
Health Expenditure (Million Kyats)				
- Current	347.1	15407.5	35914	37949.6
- Capital	117.0	8033.9	10718	10540.0
Total	464.1	23441.4	46632	48489.6
Per Capita Health Expenditure (Kyats)	11.8	423.2	825.1	843.3

* Provisional actual

Government Health Expenditure by Functions (1998-2001)

(Million Kyats)



Leading Causes of Morbidity (2007)

Sr. No.	Causes	Percent
1.	Other injuries of specified, unspecified and multiple body regions	8.8
2.	Single spontaneous delivery	6.3
3.	Diarrhoea and gastroenteritis of presumed infectious origin	6.2
4.	Malaria	5.5
5.	Other complications of pregnancy and delivery	5.2
6.	Other symptoms, signs and abnormal clinical & laboratory findings	3.5
7.	Other diseases of the respiratory system	3.1
8.	Other pregnancies with abortive outcome	3.1
9.	Other arthropod-borne viral fevers and viral haemorrhagic fevers	3.1
10.	Other viral diseases	2.9
11.	Toxic effects of substances chiefly non-medicinal as to source	2.1
12.	Gastritis and duodenitis	2.0
13.	Pneumonia	2.0
14.	Respiratory tuberculosis	1.9
15.	Cataract and other disorders of len	1.6
	All other causes	42.7
	Total	100.0

Source: Annual Hospital Statistics Report, Department of Health Planning, 2007

Leading Causes of Mortality (2007)

Sr. No.	Causes	Percent
1.	Malaria	6.1
2.	Other injuries of specified, unspecified and multiple body regions	5.0
3.	Other symptoms, signs and abnormal clinical and laboratory findings	4.9
4.	Septicaemia	4.8
5.	Other diseases of the respiratory system	4.5
6.	Respiratory tuberculosis	4.2
7.	Other diseases of liver	3.8
8.	Heart failure	3.3
9.	Other viral diseases	3.2
10.	Intracranial haemorrage	3.1
11.	Pneumonia	3.0
12.	Human Immunodeficiency Virus [HIV]	2.9
13.	Other heart diseases	2.8
14.	Stroke, not specified as haemorrhage or infarction	2.7
15.	Slow fetal growth, fetal malnutrition and disorders related to short gestation and low birth weight	2.4
	All other causes	43.3
	Total	100.0

Source: Annual Hospital Statistics Report, Department of Health Planning, 2007

Universities and Training Schools under Department of Medical Science

Sr. No.	University/ Training Schools	Degree/ Diploma/ Certificate Conferred
1.	University of Medicine (1), Yangon	M.B., B.S., Dip. Med.Sc., M.Med.Sc., Ph.D, Dr. Med. Sc.
2.	University of Medicine, Mandalay	M.B., B.S., Dip. Med.Sc., M.Med.Sc., Ph.D, Dr. Med.Sc.
3.	University of Medicine (2), Yangon	M.B., B.S., Dip. Med.Sc., M.Med.Sc., Ph.D, Dr. Med.Sc.
4.	University of Medicine, Magway	M.B.,B.S.
5.	University of Public Health, Yangon	Dip. Med.Sc, Dip.Med.Ed, MPH, Ph.D.
6.	University of Dental Medicine, Yangon	B.D.S., Dip.D.Sc., M.D.Sc., Dr. D.Sc., D.DT.(Diploma in Dental Technology)
7.	University of Dental Medicine, Mandalay	B.D.S.
8.	University of Nursing, Yangon	B.N.Sc., M.N.Sc., Diploma Speciality Nursing (Dental, EENT, Mental Health, Paediatrics, Critical Care, Orthopaedics)
9.	University of Nursing, Mandalay	B.N.Sc., M.N.Sc.
10.	University of Medical Technology, Yangon	B.Med.Tech., M.Med.Tech.
11.	University of Medical Technology, Mandalay	B.Med.Tech.
12.	University of Community Health, Magway	B.Comm.H.
13.	University of Pharmacy, Yangon	B.Pharm., M.Pharm.
14.	University of Pharmacy, Mandalay	B.Pharm.
15.	Nursing Training Schools	Diploma
16.	Midwifery Training Schools	Certificate
17.	Lady Health Visitor Training School	Certificate
18.	Nursing Field Training School	-
19.	Domiciliary Midwifery Training School	-

International Non-Governmental Organizations working in Myanmar

1. Action Contre La Faim (ACF)
2. Adventist Development and Relief Agency (ADRA)
3. Aide Medicale International (AMI)
4. Alliance International HIV/AIDS
5. Artsen Zonder Greenzen (AZG)
6. Asian Harm Reduction Network (AHRN)
7. Associations Francois Xavier Bagnoud (AFXB)
8. Asian Maternal and Child Welfare Association (AMCWA)
9. Association of Medical Doctors of Asia (AMDA)
10. Burnet Institute (Australia)
11. CARE Myanmar
12. Coorporation and Sviluppoonlus (CESVI)
13. Daiyukai Medical Foundation (DMF)
14. Humanitarian Services International (HSI)
15. International Organization Migration (IOM)
16. International Federation of Anti-Leprosy Association (ILEP)
17. Latter-Day Saint Charities (LDSC)
18. Malteser (Germany)
19. Marie Stopes International (MSI)
20. Medecins du Monde (MDM)
21. Medecins Sans Frontieres - Switzerland (MSF-CH)
22. Merlin
23. PACT Myanmar
24. Population Services International (PSI)
25. Progetto Continent
26. Save the Children (Japan)
27. Save the Children (UK)
28. Save the Children (US)
29. Support Fund Myanmar
30. Surgical Implant Generation Network
31. Terre des homes
32. Women's Federation for World Peace
33. World Concern
34. World Vision International (WVI)

National Non-Governmental Organizations working in Myanmar

1. Union Solidarity and Development Association (USDA)
2. Myanmar Women's Affairs Federation (MWAF)
3. Myanmar Maternal and Child Welfare Association (MMCWA)
4. Myanmar Red Cross Society
5. Myanmar Medical Association (MMA)
6. Myanmar Dental Association (MDA)
7. Myanmar Nurses Association (MNA)
8. Myanmar Health Assistant Association
9. Myanmar Council of Churches
10. Myanmar Anti-narcotic Association
11. Myanmar Business Coalition on AIDS
12. Pyi Gyi Khin