

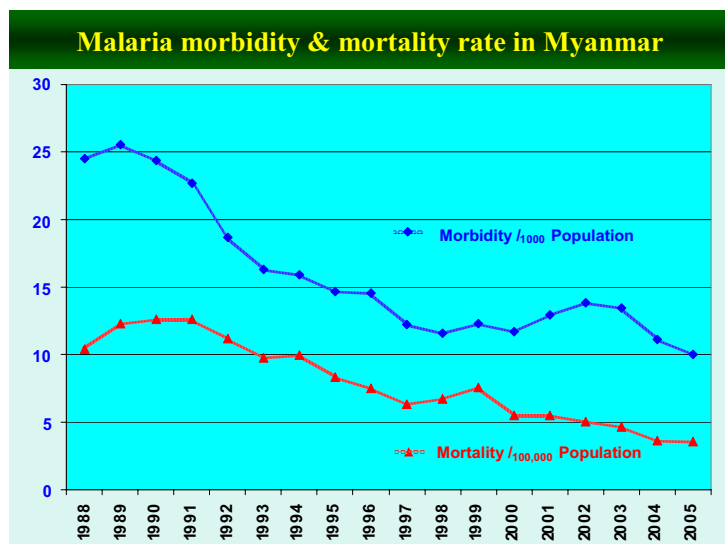
Disease Control Programme

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 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 is provided by disease control teams at Central level and State and Division levels.

Malaria

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



The main responsible vectors are *An. minimus* and *An.dirus*. In Rakhine State, *An.annularis* is responsible for local transmission and is resistant to DDT. *An.sundaicus* is responsible vector in coastal region. Drug resistant malaria is seen along the border areas and some pocket areas especially gem mining areas.

Objective of the programme is to reduce malaria morbidity and mortality mainly through increasing accessibility to quality diagnosis and appropriate treatment according to national treatment guideline and scaling up the use of insecticide treated mosquito nets and increasing coverage of indoor residual spray.

The main strategies of National Malaria Control Program 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 by introducing environmental measures as a principle method and 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 and with public sectors, private sectors, local and international nongovernmental organizations, UN agencies and with neighboring countries for resource generation
- 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 and early seeking of appropriate treatment (if possible within 24 hours after onset of fever) and production and distribution of IEC materials is also carried in different local languages for various ethnic groups. Advocacy activities are conducted to health related and non-health public and private sectors, NGOs, religious organizations and local authorities at different levels.

2. Preventive activities

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 2005, 77652 LLINs were distributed and 28601 existing nets were impregnated in some selected townships mainly in Tsunami affected area, border areas and high transmission intensity areas. Total number of households covered was 88539 and total population covered was 321567 in those program areas.



Distribution of Long Lasting Insecticide Nets

Epidemic preparedness

Number of epidemic became reduced during last five years. Ecological surveillance was emphasized together with case detection, management and preventive measures mainly indoor residual spray in development projects.

3. Early diagnosis and appropriate treatment

For malaria diagnosis, 600 microscopes were distributed down to rural health center level and RDT (Rapid Diagnostic Test) were also distributed down to sub-center level in some priority areas. Different categories of health staff were trained on malaria diagnosis and case management. After introduction of new anti-malarial treatment policy, case management with ACT (Artemisinin based combination therapy) was practiced in most of the areas. Malaria mobile teams reached up to rural area and hard-to reach border areas for improving access to quality diagnosis and effective treatment. In year 2005, community based malaria control activities have been initiated in some strategic townships.



Diagnosis & Treatment in rural areas

4. Capacity building

Different categories of health staff were trained on different technical areas regarding malaria such as training of VBDC staff (field staff) on Basic Malariology, training of health staff on malaria microscopy and training of BHS on malaria emphasizing on case management and ITN Program (Insecticide Treated Net Program).



Training of Basic Health Staff on Community Based Malaria Control & Malaria Microscopy

Quality assurance of antimalarial drugs is an important issue in reducing malaria mortality and morbidity. Mini-lab for detection of fake drug was established at the Central VBDC. Malariologists and technicians were trained on screening of fake drugs. HPLC machine for confirmation of fake antimalarial drugs was installed at FDA. Training for repair and maintenance of microscopes was also conducted in collaboration with NHL. Quality assurance of RDT was done in collaboration with lower Myanmar DMR.

Tuberculosis

Tuberculosis (TB) is one of the major public health problems in Myanmar and considered as the second priority disease in the National Health Plan (2001-2006). Recent estimates suggest that 1.5% of the population become infected with tuberculosis every year, out of which about 100,000 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 and 4.5% of TB cases were HIV positive and 60-80% of AIDS patients had TB. Multi Drug Resistant (MDR) TB among new smear positive TB cases is 1.25% (1995 Institutional based study), however, country wide drug resistance survey reported 4% of new smear positive TB cases and 15.5% of previously treated TB cases were MDR-TB in 2002-2003.

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.

The specific objectives of the National Tuberculosis Programme are to reach and sustain the 2005 global TB control targets as:

- To cure at least 85% of detected new cases of sputum smear positive pulmonary TB
- To detect at least 70% of new cases of sputum smear positive pulmonary TB cases (MDG indicator 23) and
- To sustain implementation of quality DOTS at all townships.

It aims to reach the interim targets of halving TB deaths and prevalence by 2010 (MDG indicator 24) towards achieving the Millennium Development Goals (MDG) set for 2015.

The strategies of the National Tuberculosis Control Programme 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 Directly Observed Treatment (DOT) down to the grass root level.
- Early case detection through direct sputum microscopy of chest symptomatic patients
- Attending health services and contact tracing
- Regular supervision and monitoring of NTP activities at all levels
- Strengthening partnership
- Capacity building
- Promotion of operation research

NTP have developed the Five-year National Strategic Plan (2006-2010) in June 2005.

Progress of National Tuberculosis Control Programme (Myanmar)

Indicators	1994	1999	2000	2001	2002	2003	2004	2005
DOTS Covered population (%)	8	65	85	90	95	95	95	95
DOTS Covered township (%)	6	52	71	80	95	100	100	100
Case Detection Rate (%)	32	43	56	61	70	73	81	93
Cure Rate (%)	61	74	70	73	74	72	75	n.a.
Treatment Success Rate (%)	78	82	81	82	82	81	84	n.a.

Myanmar is one of the 22 high burden countries in the world and was ranked 21st position in 2004. To control tuberculosis, Directly Observed Treatment Short Course (DOTS) strategy was introduced in 1997 and gradually expanded during (1997-2003). In 2003, it covered all 324 townships. Previously fully intermittent regimen was used in all NTP centers since 1999. NTP introduced Fixed Dose Combination (FDC) tablets for daily regimen in 2004. World TB day and World TB week commemoration ceremonies are conducted every year at central and State and Divisional levels. It was expanded to township level in March, 2005. 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) and International Union Against Tuberculosis and Lung Disease (Union). GDF extended the second 3-year grant in April 2005.

**H.E. Minister for Health
delivering the Opening Speech on
World TB Day
Commemoration Ceremony (2005)**



Basic health staff in the rural areas, voluntary health workers and national NGOs, Myanmar Maternal and Child Welfare Association (MMCWA) and Myanmar Red Cross Society (MRCS) whose membership extends down to the grass-root level, have been mobilized to deliver DOTS to tuberculosis patients. Activities for TB and HIV/AIDS prevention and control have been coordinated especially in the areas of mutual concern. In Mandalay, NTP implemented the Integrated HIV care project in collaboration with National AIDS Programme and Union in 2005.

TB control activities are funded by Global Fund to fight AIDS, TB and Malaria (GFATM) (Phase 1) in January, 2005. Supervision, monitoring and evaluation activities could strengthen with the support of GFATM.

NTP is now conducting the TB prevalence survey which can evaluate the effectiveness of TB control activities after implementation of DOTS strategy since 1997.



DOTS at work place



Disseminating Health Education on TB

HIV/AIDS

AIDS is one of the priority diseases included in the National Health Plan of Myanmar. The National Health Committee has laid down clear guidelines to fight AIDS as a national concern. The National AIDS Committee, formed since 1989 is an active multisectoral body for formulation of National Strategic Plan to prevent and control HIV/AIDS in Myanmar. The forty three AIDS/STD Prevention and Control teams strategically situated in all States and Divisions of Myanmar form the core of the National AIDS Control Programme. The action plan for AIDS and STD prevention and control activities is subsumed under the National Health Plan.

Active surveillance for HIV and AIDS began in Myanmar since 1985. The first AIDS patient was reported in 1991, an injecting drug user. Biannual HIV Sentinel Surveillance started in 1992, however, since 2000 the HIV Sentinel Surveillance has been conducted once a year. HIV Sentinel Surveillance has now expanded to all States and Divisions with the sentinel sites totaling 33. The HIV sentinel subpopulation are injecting drug users, male STD patients, commercial sex workers, pregnant women attending antenatal clinics, blood donors and new military recruits. About 20,000 individuals were tested for HIV antibody, each year for sentinel surveillance. Monthly HIV positive reporting of blood donors and hospital patients clinically suspected of AIDS cases were also taken into consideration in the analysis of HIV prevalence trends in the country. A sample size of 8,000 at each round was surveyed for HIV/AIDS and STD related risk behaviors. Sentinel Surveillance System is integrated by Behavioral Sentinel Surveillance System, STD (syphilis) Sentinel Surveillance. Monthly AIDS death reporting system has already established through public hospitals.

National AIDS Programme under the Department of Health, Ministry of Health, together with other Ministries, WHO Head Quarter (Geneva) and UNAIDS jointly held a workshop on 15th to 17th September, 2004 for estimation of number of people living with HIV/AIDS in Myanmar. According to the estimates arising out of the workshop there are a total of 338,911 people living with HIV/AIDS in 2004. In addition, workshop on HIV/AIDS projection and demographic impact analysis in Myanmar was conducted on September 28th to 30th, 2005 in Yangon.

The general objective of the National AIDS Programme is to increase the awareness and improve the perception of HIV/AIDS in the community by promoting access to information and education leading to behavioral change and adoption of healthy life style.

Strategic Areas of the National AIDS Programme for Prevention and Control of HIV/AIDS are:

1. Advocacy to authorities and decision makers, implementing partners, private sectors and community leaders
2. HIV and STD prevention education
3. Targeted interventions
 - 3.1 Prevention of sexual transmission
 - 3.2 Prevention of HIV infection among injecting drug users
 - 3.3 Prevention of mother to child transmission
 - 3.4 Provision of safe blood and blood products
 - 3.5 HIV prevention among health care setting
4. Care and Treatment of sexually transmitted patients and people living with HIV/AIDS
5. Programme Management and Support including monitoring and supervision
6. Capacity building

HIV/AIDS /STD Prevention and Control Activities of the National AIDS Programme are:

1. Advocacy
2. Health education (awareness raising)
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

One of the remarkable activities was "Third intercountry training of trainers on HIV/AIDS Voluntary Counselling and Testing" held in Yangon on 18-30 July and 7-12 November 2005 attended by the participants from 12 countries. A group comprising of WHO (Geneva), WHO (China) and Care India conducted the 100% Targeted Condom Promotion Programme Review to provide recommendations for improving programme implementation, and specifically to propose adjustments in the coverage, quality and approaches of the 100% TCP programme in July 2005.



***Professor Dr. Kyaw Myint, Minister for Health,
delivering speech at Opening Ceremony of Third Intercountry Training of Trainers on
HIV/AIDS Voluntary Counselling and Testing***

Most importantly, "National Strategic Plan for Scaling-Up HIV Prevention and Control in Myanmar for 2006-2010" was started to develop with the agreed guiding action framework, providing basis for coordination of the work of all partners in the national response since December 2005. As part of the plan, the National AIDS Programme External Review Team had also assessed the adequacy and relevancy of the national policies on HIV/AIDS strategies and prioritization in line with the national response strategic direction between March 29th and 7th April 2006.

There are other activities carried out to combat HIV/AIDS in Myanmar. With the policy guidance laid down by the National Health Committee, National AIDS Committee has been closely monitoring and supervising the activities conducted by National AIDS Control Programme, under the Department of Health, Ministry of Health. The activities include prevention of transmission through sexual mode within which 100% targeted condom promotion was an integral part (in 154

townships as of December 2005), prevention of HIV transmission among injecting drug users in 20 townships, prevention of mother to child transmission of HIV (PMCT) (in 79 townships and 17 hospitals up to 2006), provision of care and support in six general hospitals (Waibargi infectious hospital, Mandalay general hospital, Dawei general hospital, Kawthaung general hospital, Tachileik general hospital and Myawaddy general hospital in 2005), screening of blood for HIV for the safe blood supply (currently in all hospitals up to township level), promotion of multisectoral collaboration and cooperation, special programme activities, surveillance, supervision, monitoring and evaluation. Provision of care and support includes counseling and testing, provision of antiretroviral therapy and treatment of opportunistic infections, and comprehensive community and home based care. These activities are being carried out not solely by Ministry of Health but also in collaboration with other related Ministries such as, Ministry of Education, Ministry of Labour, Ministry of Railway Transportation, Ministry of Home Affairs and so on UN agencies, local non-governmental organizations and international non-governmental organizations.



Introductory Training of Health Care Providers on Anti-Retroviral Therapy conducted at 300 bedded Hospital, Nay Pyi Taw



Voluntary Confidential Counselling on PMCT



Professor Dr. Mya Oo, Deputy Minister for Health, delivering prizes to winner of Competitions to Commemorate World AIDS Day 2005

Milestones of HIV/AIDS Prevention and Control in Myanmar

- ◆ Ad hoc studies for HIV started in 1985
- ◆ First HIV infected case was recorded in 1988
- ◆ AIDS control programme started in 1989 with a short-term plan
- ◆ National AIDS Committee established in 1989
- ◆ First AIDS case reported in 1991
- ◆ HIV Sentinel Surveillance started in 1992
- ◆ Behavioural surveillance and STD (syphilis) surveillance started in 1997
- ◆ Prevention of mother-to-child transmission programme started in 2000
- ◆ 100% condom use programme started in 2001
- ◆ Antiretroviral therapy for people living with AIDS started in the public sector in 2005

Trachoma Control and Prevention of Blindness

Trachoma Control and Prevention of Blindness project was launched in 1964. At that time trachoma was the 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 NGOs, active trachoma rate was reduced to under 1% in 2000. As trachoma blindness is greatly reduced, cataract becomes the main cause of blindness in the country.

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

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 covers 18.1 million people in 79 townships of 4 divisions.

With the national objective to reduce blindness rate to less than 0.5%, the following strategies and activities are undertaken by the project.

Strategies

- To improve cataract surgical rate and quality of surgery
- To make Primary Eye Care available to all and eliminate avoidable blindness
- To promote community participation
- To provide cataract surgical services at affordable price and free services to poor patients (19090 Cataract operation and 548 free of charge operations in 2005)
- To conduct outreach services (600 outreach cataract operations in 2005)



Outreach Cataract Surgical Service



Activities

■ **Promotive (by 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



Village Model Eye Health Examination



School Eye Health Examination

■ **Curative**

Provide medical and surgical services at field and base centres.

■ **Training**

Provide Primary Eye Care Training to basic and voluntary health workers and NGOs.

■ **International Eye banks (Yangon and Mandalay)**

Procurement, quality control and distribution of corneal tissue are the activities undertaken by the eye banks.

■ **Operational Research**

- Rapid assessments of cataract surgical service were done in 9 townships to determine prevalence of blindness, coverage of cataract surgical service and out come of cataract operation.
- Rapid assessments of trachoma were done in 12 townships to identify pocket area and for elimination of trachoma.

In 2005, the project could accomplish the following activities:

● Cataract surgery	19090
● Glaucoma surgery	2963
● Other major surgery	575
● Other minor surgery	11714
● Trichiasis surgery	4566
● Free of Charge Cataract Surgery	548
● No. of villages examined	3157
● No. of population examined	1781848
● No. of schools examined	1689
● No. of students examined	24166

Activities for elimination of trachoma in Sagaing, Shwebo and Monywa districts were started in September 2003 and completed in December 2005.

Leprosy

Leprosy was no more a public health problem since 6th February 2003 when its elimination had been officially declared at the meeting of Third Global Alliance for Elimination of Leprosy held on 6th to 8th February 2003 at Yangon, Myanmar. All States & Divisions followed in achieving leprosy elimination at the end of the year 2003.

Reducing the Leprosy Burden Activities

After achieving leprosy elimination, sustainability of the status of elimination becomes an important role of the leprosy control programme. Continuation of routine case finding and MDT services are still major activities to be done. The leprosy control programme implemented special case finding activities along with MDT services in the following areas where new cases are assumed to be still remaining.

- Areas still high in leprosy prevalence (pocket areas)
- Uncovered areas
- Areas with migratory population
- Urban and peri-urban areas



Prevention of Disabilities & Rehabilitation Activities

In post-elimination era, prevention of disabilities (POD) and rehabilitative measures turned out to be a great challenge as there were various forms of rehabilitation namely psychosocial rehabilitation, socio-economic rehabilitation, physical rehabilitation etc. Since 2003, POD activities were initiated in (11) townships of Mandalay, Magway, Sagaing and Bago Divisions. Follow-up programme of POD activities in those townships are being implemented. POD activities mentioned above are now expanded to remaining townships of Bago Division in a phase manner.

Achievement and Current Situation

Indicators	2004	2005
Registered cases	2708	2679
Prevalence Rate/10,000 population	0.49	0.48
New Cases	3756	3571
Cases of Release Form Treatment (during the year)	3807	3694
Cases of Release Form Treatment (Cumulative)	259,963	263,657

**H.E. Minister for Health
viewing the exhibition on
3rd Leprosy Elimination Commemorative Day**

