Mae Tao Clinic

P.O Box 67, Mae Sot, Tak 63110, Thailand.

701 Moo 1, Intarakiri Rd., Tha sai louard, Mae Sot, Tak Province 63110

Tel: (055) 563-644/ Fax: (055) 544-655, email: win7@loxinfo.co.th

Annual Report 2004

Submitted by: Dr. Cynthia Maung
Director, Mae Tao Clinic
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1. Overview of Current Political and Social Context:

The current social and political situation on the Thai-Burma border continues to be volatile. The current cease fire discussions between the SPDC[1] and KNU[2] have brought more confusion than clarity. Despite the talks, there is an increased presence of SPDC troops in the Karen state, creating much anxiety for the Karen villagers. Without a constructive or durable solution, villagers continue to be vulnerable to SPDC dominance. Furthermore, many international organizations, including International Community of the Red Cross and other health NGOs[11], are working within Burma to provide relief and some health services. Working within the confines of the military junta, these organizations have little local integration and do not have a sustainable development plan for the future. The local tensions, the lack of a durable long-term plan, and the continued house arrest of the elected leader Aung San Suu Kyi lead to much uncertainty about the future of the entire country.

The alliance between the Thai and Burmese governments has strengthened, actualizing more business ventures and relationships. The governments are now planning the construction of numerous hydroelectric dams along the Salween River, two of which will very likely have a negative impact on the lives of 50,000 people in the northern region of the Karen state.

The Thai government now issues “stay permits” to illegal migrants from Burma, enabling them to stay legally in Thailand for one full year. In order to receive a stay permit, however, migrants need to have a house number and Thai landlord support, which in turn identifies to authorities where migrants are living. With a stay permit migrants can apply for a work permit, but with a 4,000 baht application fee most cannot afford this opportunity. A work permit enables migrants to receive health care from Thai facilities, but again because the application is so expensive, most migrants have only limited access to health care services. Furthermore, after the specified year of the stay permit the government has no set policy or solution as to what will happen to the migrants, thus creating more uncertainty and insecurity. Despite these challenges, Burmese migrants continue to come to Thailand. The opportunity to register for these permits ended in July, so new migrants must stay illegally and are particularly vulnerable to the Thai authorities. The health workers and staff at Mae Tao Clinic currently have stay permits to reside in Thailand. Although this may be a good temporary solution, the clinic continues to seek a way for health workers to receive an alternative "health worker" status in Thailand which would give them longer-term stability.

The health collaboration led by the Thai Ministry of Health and the World Health Organization increases communication and information-sharing between international nongovernmental organizations, the International Organization for Migration (IOM), local organizations, and the Mae Tao Clinic. Despite the increased collaboration between groups, issues of health access remain problematic for some of the migrant workers and refugees who feel their personal security is still threatened within Thailand. Many employers and factory owners, who provide work for a large percentage of the migrant and refugee populations, restrict access to these health services to avoid work force reduction. In addition, migrant workers need education concerning how and where to access and utilize health services. Organizations need to work to increase awareness and accessibility of their health services for these target groups.

The United States is currently sponsoring a resettlement program for Burmese and Karen refugees along the Thai-Burma border, with the specific goal of relocating people from SPDC-opposition groups. This includes a number of Mae Tao Clinic health workers. In order for MTC[3] to maintain a high level of service, these staff members need to be replaced by other recruits.

In 2004, the clinic has developed many new endeavors. A Community Health Assessment training program included two people from each of six different Burmese ethnic groups and was designed to discuss ways to improve health information systems across the border. This cross-cultural discussion enabled communication about and assessment of the respective communities and improve the ways to monitor service across the border.

Mae Tao Clinic has expanded its school health programs. MTC staff workers and migrant school teachers have collaborated to conduct regular deworming and Vitamin A distribution for school children. The clinic also is involved with the revision and review of the school health curriculum to make sure it is appropriate for the specific conditions of the migrant workers.

Some of the graduates from the Maternal and Child Health training and Health Assistant training continue to reside with Mae Tao Clinic as interns in order to improve their clinical skill. Others returned to the refugee camps and Burma's interior where they will use their training to collaborate with other local and international health organizations.

Cross-Border Health Collaboration

Since 1994, Mae Tao Clinic has supported two community health care services in Karen State. The Pa Hite and Ler Per Heh clinics provide both curative and preventive health care to approximately 14,000 and 2,000 IDPs, respectively.

In September 2004, the graduates from the Health Assistant and Maternal Child Health trainings established primary health centres in their respective areas (Kachin, Shan, Palung, Arakan, Kayah areas). Each clinic has a target population of 4,000 to 8,000 and provides basic medical service and community health education. In 2005, Maternal and Child Health services were added and expanded to 7 ethnic areas. Community Health Worker training and continual education for health workers was conducted. Mae Tao Clinic and Burma Medical Association collaborated on this program to strengthen information systems among ethnic health organizations and to provide capacity building for health workers from Burma.

Advocacy & Networking

Mae Tao Clinic also endeavours to send delegations to international and local conferences. Participation in these conferences helps strengthen our network with local and international organizations. Moreover, presentations given at these conferences raise awareness of health problems and health services, and improve local skills by sharing experiences and learning from others.

2. Mae Tao Clinic 2004 Summary

The Mae Tao Clinic serves Burmese and Karen migrant workers and internally displaced people on both sides of the border.

During 2004 we were able to provide care for an increasing number of patients with an increasing variety of ailments. We had 102,241 visits, which was a 23% increase over the previous year, and 68,790 cases, which was a 17% increase.

We estimate that 52,290 persons came to our clinic during 2004. This would suggest that we saw 29% of the people in our estimated catchment population of 150,000 persons (taking into account that there may be other health institutions where patients may go to seek care). The average number of visits per day was 328 persons; on average there were about 2.0 visits per patient during the year.

Malaria continues to be a primary concern for the clinic. To exacerbate this problem, the Tak Malaria Initiative project can no longer supply the clinic with medications so treatment has become limited. As word spreads about the clinic's services, more and more patients come from Burma for non-emergency surgeries and this further strains the clinic's referral funds.

Mae Tao Clinic continues to work through cross-border seminars and workshops with health organizations that provide services for internally displaced people in Burma.

Total visits	102,241 (average visit per day = 328)
Total patients	52,290 (2 visit/person/per year)
Total Caseloads	68,790
Female of reproductive age (15-45 age)	41%
Under 5 children	19%

Mae Tao Clinic Objectives:

- To provide health services for displaced Burmese populations along the Thailand-Burma border.
- Initial training of health workers and subsequent ongoing medical education.
- To strengthen health information systems along the border.
- To improve health, knowledge, attitudes, and practices within local Burmese populations.
- To promote collaboration among local ethnic health organizations.

- To strengthen networking and partnership with international health professionals and institutions.

Health Services

- Medical Service (OPD/IPD)
- Surgical (OPD/IPD)
- Reproductive Health OPD/IPD including basic EmOC[4] services
- Child Health Services (OPD/IPD)
- Laboratory / Blood Bank
- Primary Eye Care and Eye Surgery
- Prosthetics and Rehabilitation
- HIV/AIDS Prevention (Safe Blood, VCT[5] and PMTCT[6])
- Malaria Management
- Tuberculosis Case Finding and Referrals
- Mae Sot Hospital Referral
- Migrant Outreach and Cross Border Collaboration (support home delivery services, school health promotion and primary health care services)

The increased severity of cases from Burma may reflect the health status, health care infrastructure or social-economic conditions there; it may also be that Burma residents are seen in the later and more severe stages of disease at our clinic, because of the postponement of medical care due to the security risks and transportation costs associated with cross border travel. Environmental differences between the two border regions such as the urban / rural dwelling areas, which affect mosquito transmission, may also be a contributing factor for cases such as malaria.

This is also shown in the below table, which indicates that slightly more Thailand residents than Burma residents visit the clinic, yet factors that would indicate greater severity, such as referrals or blood transfusions, are from patients residing in Burma.

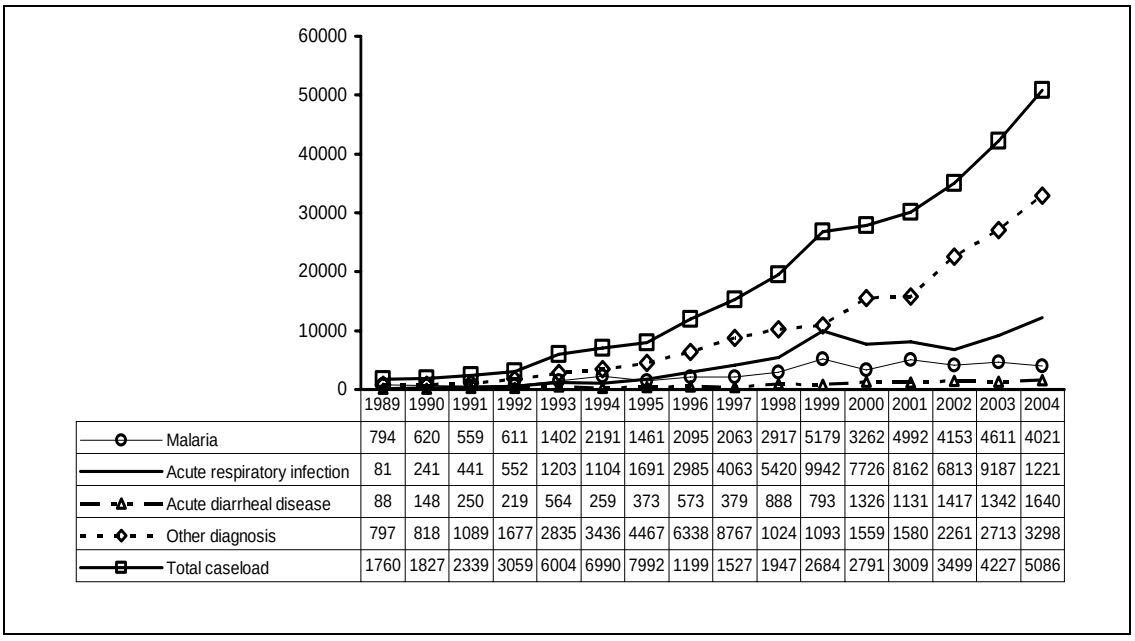
Comparison of Burma and Thailand cases:

Health Service 2004	Number	Burma:Thailand Ratio
Total Visits	102,241	2:3
Referrals	644	3:2
Blood Transfusions	890	3:1
Tubal Ligation	184	3:1
Eye Surgery	331	4:1
Malaria (PF)	2649	3:1
Pul: Tuberculosis (confirmed)	234	2:1
Severe Malnutrition	40	2:1

The total caseload has increased over the years. However, the number of malaria cases has not increased proportionally. This may be because the clinic sees more chronic diseases. Also, more men arrived in Mae Sot during the earlier years, but in later years more women and children arrive – this pushes the caseload to conditions such as childhood illness and reproductive health problems.

It is an achievement that we were able to provide care to more people and our patient visits increased; more morbidities were treated and some mortalities were averted. However, it is difficult to assess the impact our health services have in morbidity and mortality reduction amongst our catchment population and what proportion of the target population we reach. This is because a portion of our catchment population lives inside Burma, while another large portion are migrants who live illegally in Thailand and whose location and number is constantly changing. It is therefore difficult to ascertain target population information and the end impact of our services.

MTC's patient visits have grown steadily over the last few years, while the number of our health workers has increased more slowly. This can have an affect on the capacity of our clinic to deliver services. Also, a few of our experienced medics left during 2004 for UNHCR[7] resettlement in other countries, while there was an increase of new health workers who are still in the midst of gaining their experience.



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Malaria	794	620	559	611	1402	2191	1461	2095	2063	2917	5179	3262	4992	4153	4611	4021
Acute respiratory infection	81	241	441	552	1203	1104	1691	2985	4063	5420	9942	7726	8162	6813	9187	1221
Acute diarrheal disease	88	148	250	219	564	259	373	573	379	888	793	1326	1131	1417	1342	1640
Other diagnosis	797	818	1089	1677	2835	3436	4467	6338	8767	1024	1093	1559	1580	2261	2713	3298
Total caseload	1760	1827	2339	3059	6004	6990	7992	1199	1527	1947	2684	2791	3009	3499	4227	5086

Trend of caseloads in Medicine & Surgical Departments (OPD (child & adult), IPD (child & adult), and Surgical (IPD & OPD).

Hospital Admission (Cases)

	2003	2004	% increase
Medical IPD	3786	5179	36.8%
Surgical IPD	275	420	53%
RH IPD	2734	3186	16.5%
Eye (surgery)	121	331	175%
Prosthetics	137	205	50%
Total	**7053**	**9321**	**32%**

3. Constraints and Challenges

- Mae Tao Clinic is not officially registered with any government. This makes it difficult to advocate for the rights of our staff and patients. Our staff still fear arrest if they are outside the clinic compound, and the clinic's future is always uncertain.
- Most of our staff have been trained at Mae Tao Clinic by Mae Tao Clinic staff. Outside the clinic their skills and qualifications are not recognised by official health authorities. In the case of resettlement and repatriation our staff would likely be viewed as unskilled labourers because there is no valid certification of their abilities.
- Due to their legal status, lack of certification, and language barriers it is also difficult for staff to access more advanced educational opportunities.
- It is difficult for our staff to travel anywhere outside of the clinic due to their status as migrants in Thailand.
- Much of MTC's target population cannot easily access the clinic due to cost, distance and security problems. As a result, when patients do finally make the trip to the clinic they are all too frequently severely ill. Ideally, MTC needs to provide outreach services and extend preventive services in the community. However, as our staff cannot travel easily this is not possible. At the same time, some migrant communities are not easy to access because of distance or restrictions by employers.
- The clinic's caseload continues to increase. At the same time, demand for extending services to include chronic and long-term illnesses increases. This may not be sustainable for the clinic, in terms of staff numbers (staff continue to leave for third countries), space for facilities, funding and skills.
- In 2004, the clinic faced severe funding shortages which resulted in reduced referral services, medicine shortages and debts with suppliers.
- Although the clinic issues delivery certificates for every birth at MTC these certificates are not certified by any government. This means that these children are in effect stateless and are unlikely to be granted full citizen rights in any country. In addition, MTC data indicates that a large proportion of women still deliver at home with traditional midwives. These children will not receive a delivery certificate and will not have any official documentation of their existence.
- In 2004 the numbers of babies and children being abandoned at MTC continued to increase. The clinic worked as much as possiblewith Social Action for Women, which has a home for babies and children. But due to SAW's own funding restrictions this was not always possible.

4. Inpatient and Outpatient Medicine

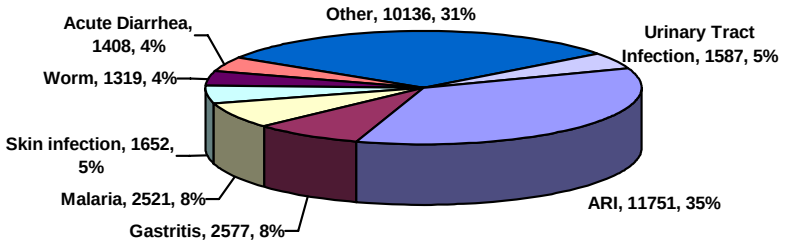
(i) General Medicine Department

The Outpatient departments provide care for patients 6 days a week, while IPD admits children and adults with severe medical problems 24 hours a day. Adult OPD had 25,698 cases, which was a 25% increase over the previous year, and Child OPD saw 11,376 cases, which was a 6 % decrease.

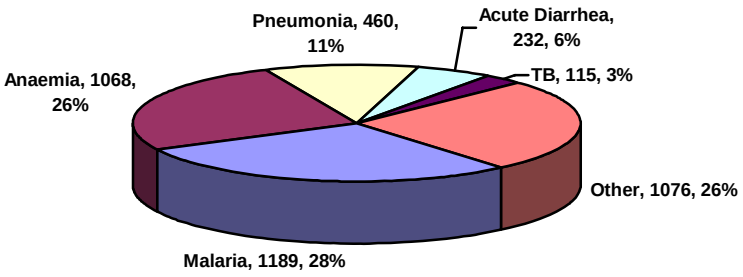
Child OPD treated an average of 41 children a day (with more on immunization days) and Adult OPD saw an average of 99 patients per day. Malaria comprised 8% of all cases seen by the Medicine Department (OPD); 28% of total IPD cases were malaria.

Anemia is a common underlying condition in many of our patients along the Burma-Thai border. As a first and second diagnosis in the Medicine Department there were 2,325 cases. This figure makes it the fourth highest-ranking condition.

Seven most common OPD cases (Total 37074)



Five most common IPD diagnoses (Total 5179)



Demographics for selected Medicine Department cases.

Cases	OPD	IPD	Total	Average per Day
Total Cases	37074	5179	42253	116
ARI Mild	11366	8	11374	31
Gastritis	2577	158	2735	7.5
Malaria PF	1588	1025	2613	7
Anemia	1257	1068	2325	6.4
Urinary Tract Infection	1587	250	1837	5
Skin Infection	1652	0	1652	4.5
Worm Infestation	1319	76	1395	3.8
Acute Diarrhea	1155	194	1349	3.7
Beri Beri	874	83	957	2.6
Malaria PV/PM	846	90	936	2.4
CVS diseases	657	212	869	2.3
ARI Pneumonia	385	460	845	2.3
Eye Problem	821	0	821	2.2
TB Sputum Confirm	227	115	342	0.9
Dysentery	253	38	291	0.8
Hepatitis	180	25	205	0.6
Malaria Mixed	87	28	115	0.3
Measles (suspected)	66	23	89	0.2
AIDS Confirm	23	61	84	0.2
Meningitis (s&c)	0	48	48	0.1
Malaria Presumptive	0	46	46	0.1
Severe Malnutrition	0	40	40	0.1
AIDS Suspect	0	38	38	0.1
Dengue Fever (suspected)	18	16	34	0.1
Other Problems	10136	1077	11212	31

(ii) Inpatient Department (IPD)

IPD consists of child and adult IPD. Child IPD sees patients under 12 years of age. Of the total admissions, 766 were children under 5 years old. On average, there were 10 admissions a day and the average length of stay was 6 days. The department is often busy and crowded. The patients, who have severe conditions and/or chronic illnesses, require complex care. Senior health workers and a volunteer physician provide ongoing training and medical supervision.

IPD had 3,802 admissions, 170 referrals and 194 fatalities. Infectious diseases accounted for 46% of total admissions.

In 2004, out of total mortalities, 67 patients (35%), died within 48 hours. This suggests that delayed presentation was an important factor in many deaths. Transportation costs to the Clinic are high, and illegal migrants who are less ill are more likely to be arrested than those who are severely ill.

IPD's overall case fatality rate of 5.1%, shows a slight increase over the previous year. The overall mortality rate may be a result of issues of access. Patients tend to arrive in the late stages of fatal diseases, and an increase in cases such as AIDS, which we are not currently able to treat, increase avoidable mortalities. These causes represent areas for future interventions: advocacy for and creation of treatment programs for conditions such as HIV/AIDS; a system to ease Clinic access to patients.

IPD's annual case Fatality rates and Referral rates

	2002	2003	2004
Number of IPD Admissions (1st Diagnosis)	3037	3791	3802
Fatalities	95 (3.1%)	174 (4.9%)	194 (5.1%)
Referrals	NA	81 (2%)	170 (4.5%) (101 for TB)

Monitoring and Evaluation - IPD

Chart and record reviews are conducted weekly by health worker staff by department (including IPD and OPD) as part of our quality of care improvement activities.

A physician working in IPD did a random chart review survey for the percentage of 'diagnosis treated according to the treatment protocol'.

Eighty-eight random IPD charts among two groups (40 charts were children < 5 and 48 charts were persons >= 5 years) were chosen from IPD admissions in 2004. In 98% of the charts the diagnosis matched the treatment protocol (two charts did not). Thirty two charts were of malaria patients, and for all of these the diagnosis matched the treatment protocol.

Vitamin A prophylaxis and Deworming treatment, was assessed for 40 IPD charts of children under 5 years, and for all cases the medications were given in a timely and correct fashion.

A future plan is to develop more chart reviews surveys for 'percentages of diagnosis treated to protocol' for significant diseases, such as malaria, for OPD and IPD. (A percentage of 'diagnosis to treatment protocol' plan was already developed for malaria during 2005, and we are planning to implement it.)

Case fatality rate comparison was also used to assess IPD. The average case fatality rate range, as mentioned by WHO, for severe malaria is between 20% to 40% and the average case fatality range for severe malnutrition is 20% to 30%. IPD's case fatality for cerebral malaria (25.6%), severe malaria (12.2%), and severe malnutrition (24.3%) fall within or below these ranges.

(iii) Mae Tao Clinic Mortality

The number and causes of fatalities that occur among different age groups in MTC, out of the 102,241 patient visits to the clinic and an estimated 52,290 patients seen. (There were also fatalities that took place in the community among our clients from the HIV Mother to Child Transmission Prevention Program in the previous year).

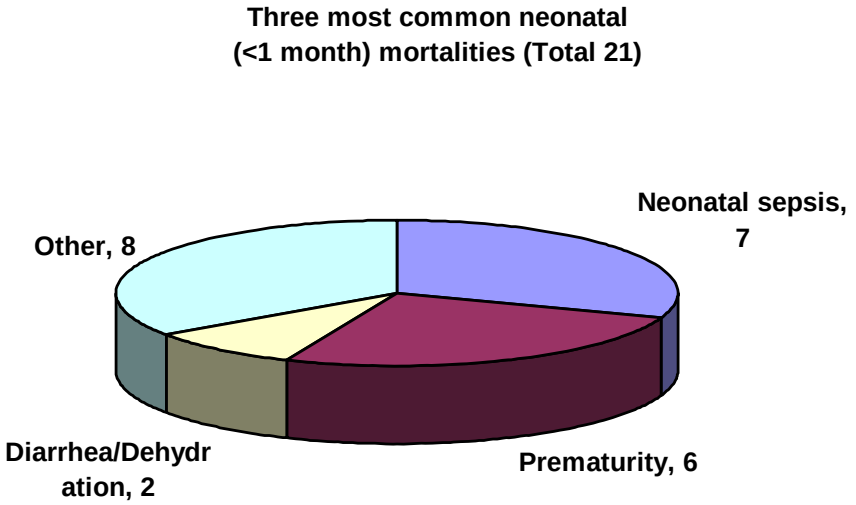
Unfortunately, the younger age groups are more frequently vulnerable to fatal diseases, and the causes of fatalities among each age group differ. This information helps to indicate where needs are and what conditions are most affecting patients, and is used to evaluate priorities and targeting of future interventions in averting mortalities. (There were also 5 deaths that took place in the community among our HIV Mother to Child Transmission Prevention Program) ***(see the following table)***

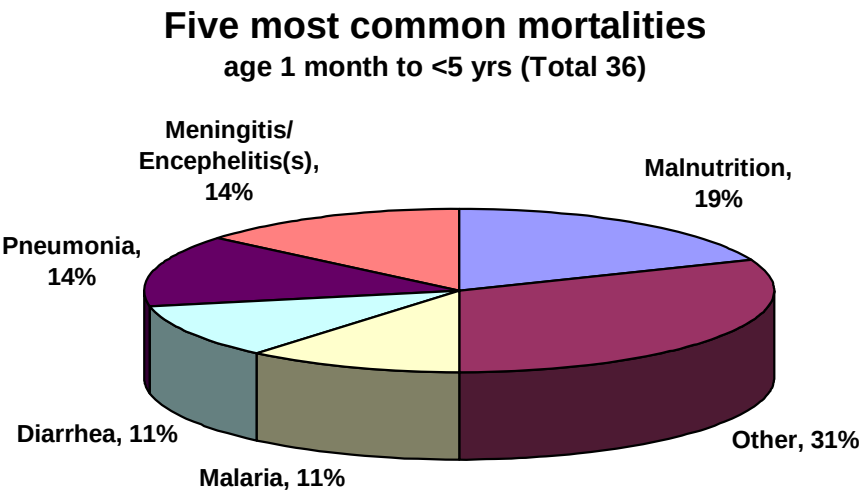
Fatalities at MTC during 2004:

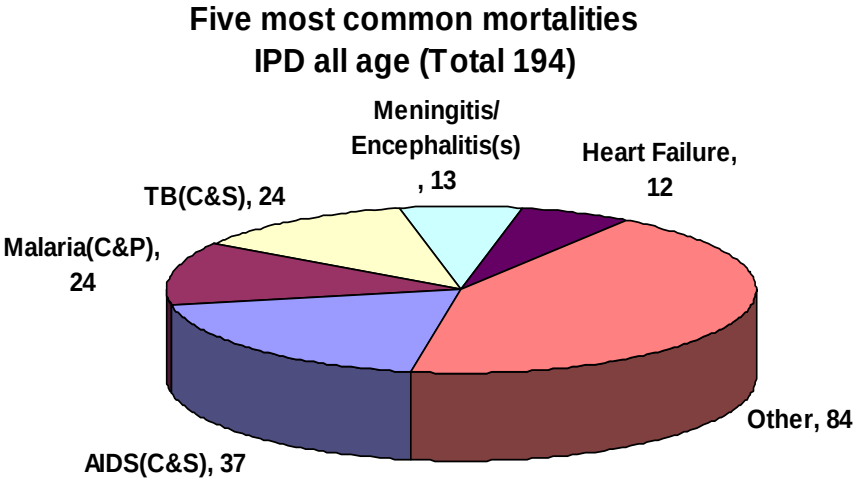
	Total	% of Total Deaths	IPDs Age specific case fatality
Fetal deaths (still births)	27		
Neonatal (birth to 1 month)	21	10%	14.6%
Infant (1 mo. to <=1 yrs)	20	9%	8.1%
Under 5 yrs (1 yr to <5 yrs)	16	7%	6.2%
>=5 yrs	158	72%	5.2%
Maternal	4	2%	
Total (not including still births)	220		

Note: The number of deaths that occur among our referrals to Mae Sot Hospital are not presented, because of some constraints in collecting this information. Neonatal and Maternal cases are seen in RH dept, while Medical IPD sees the other cases.

Common causes of mortality for each age group.
c=confirmed. p=presumptive. s=suspected.







5. Malaria, TB, HIV/AIDS

Malaria

Components of our malaria program include laboratory diagnostics, drug supply, health education, pregnancy screenings for women, and curative treatment.

In 2004, there were 4,021 malaria cases at MTC, with 25 fatalities (one fatality was a maternal death).

89 percent of Medicine department's malaria cases were simple or uncomplicated, while 4% were severe/cerebral or cerebral presumptive malaria (Four percent may seem to be a small number, but some uncomplicated cases may progress to severe cases, if prompt and effective treatment are not given). 66 percent of the MTC's malaria cases seen were PF (Plasmodium Falciparum). Most MTC cases (both uncomplicated and severe) and fatalities from malaria were among male patients and Burma residents.

Treatment of malaria is conducted according to Burmese Border Guidelines and SMRU protocol. IPD have traditionally used Artesunate Combined Therapy (ACT); in 2002, we began to use ACT for outpatient malaria cases, as well, through funding by Thai Public Health. Due to funding problems in 2004, we reverted to Quinine and Doxycycline for outpatients (while ACT was continued to be used in IPD). By February, 2005, funding became available and we were again able to use ACT for outpatients.

MTC Total Malaria Cases (Lab Data).

PW = Pregnant Women screenings

Cases	OPD			IPD			MTC Total			
	< 5	> =5	Total	< 5	>= 5	Total	< 5	>=5	PW Screen	Total
PF	81	1496	1577	178	845	1023	259	2341	49	2649
PV/PM	107	877	984	28	62	90	135	939	26	1100
Mixed	12	98	110	7	21	28	19	119	5	143
PFG	16	64	80	0	0	0	16	64	3	83
Cerebral Presumptive	0	0	0	8	33	41	8	33	0	46
Total	216	2535	2751	221	961	1182	437	3496	83	4021

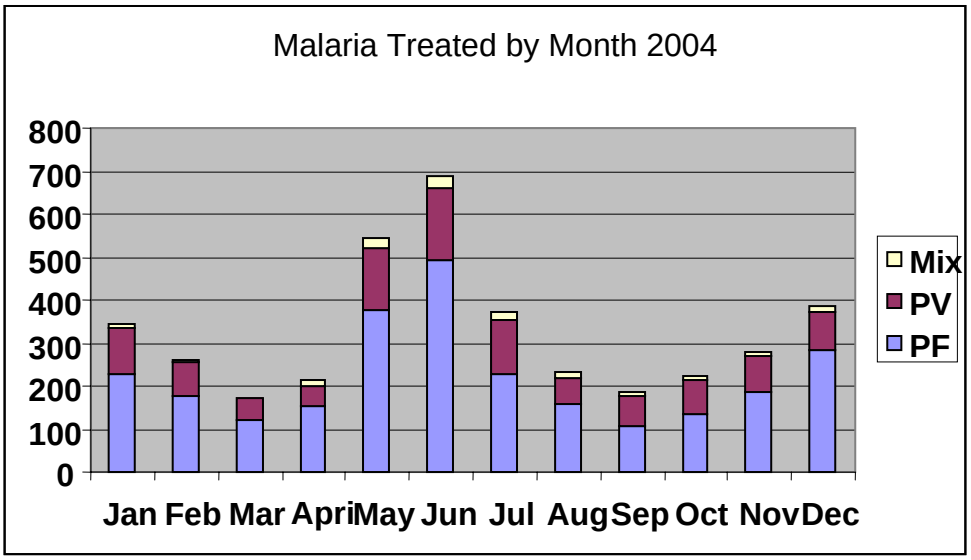
* Note: RH malaria totals are included inside PW and OPD totals.

IPD admitted 113 cases of severe malaria and 41of presumptive cerebral malaria. These patients often require longer stays, intensive care, and blood transfusions for severe anemia. 56 percent, or 659, of the malaria cases admitted to IPD were of simple malaria. This was because 129 of those patients were treated for malaria less than 2 months prior and so were admitted for observed treatment. The rest were generally weak or anemic (but not severe) or came at night when OPD was closed.

IPD Malaria Cases (1st and 2nd diagnosis)

Case	Total	Refer	Deaths	Case Fatality	Average days stay & range
PF Simple	659	1	-	-	3.6
PF Hyper	251	-	-	-	3.9
PV / PM	90	-	-	-	3.9
Mixed (PF + PV)	28	-	-	-	3.2
PF Severe	74	5	9	12.2 %	5.8 (0 to 39)
PF Cerebral	39	1	10	25.6 %	7.1 (0 to 47)
PF Cerebral Presumptive	41	-	5	12.0 %	5.9 (0 to 30)
Total IPD	1182	7	24	2.0 %	-

Note: Cerebral malaria is a part of Severe Malaria, but it is reported separately here to show the mortality rate.



The higher incidence of malaria corresponds with the rainy season months.

Malaria - Monitoring and Evaluation

Elements of a malaria monitoring and evaluation plan include: percentage of cases treated with lab confirmation; percent of cases diagnosed and treated promptly according to protocol; number of stock outs and poor quality malarial drugs usage; routine external reference lab review for malaria microscopic slides; patient knowledge of malaria prevention and early health seeking behavior; percentage of pregnant women screened. (No funding is currently available for Insecticide Treated Mosquito Net distribution.)

We plan to increase our monitoring and evaluation for each of the above categories and set target goals, for quality assurance activities. (A plan to monitor these indicators has been developed in 2005, and a patient survey was completed in early 2005).

Some of our malaria monitoring and evaluation activities during 2004 included the following (some activities are discussed in more detail in other sections):

A physician did a random chart review for percentage of 'diagnosis treated according to treatment protocol' for IPD admissions. 32 charts were malaria admissions and for a 100% of these the diagnosis matched the treatment protocol.

For pregnant clients, 81% of total ANC[8] clients consented to be screened for malaria on their first ANC visit. (Our target was at least 90% documented). For those outpatient pregnant women who tested positive for malari, we were able to admit 94% in RH IPD for observed treatment.

Issues of funding and malaria drug supply for outpatients, were mentioned earlier. We used quinine and doxycycline for outpatients for about 9 months during 2004, but continued to use ACT for inpatients. In February 2005, we were able to use ACT again for outpatients, once funding was found.

Laboratory slide readings of the staff were frequently assessed by senior health workers. However, we plan to increase our use of routine external reference lab review.

Tuberculosis

OPD refers patients suspected of having TB to MSF[9] for lab confirmation and treatment. IPD sends three sputum samples to MSF for every patient who has a cough; 115 patients were TB sputum positive. In IPD, when TB patients are very ill, they are admitted for treatment until stable and then referred to MSF. A lumbar puncture is preformed for patients with suspected TB meningitis and treatment is given upon lab confirmation. Some sputum negative or extra pulmonary TB cases are treated or referred to MSF. Most lab confirmed cases and fatalities were from males and Burma residents.

IPD TB morbidity and mortality:

	1st dx	2nd dx	Total	Refer	Deaths	Case fatality	Average days stay & range
TB lung sputum positive	108	7	115	80	13	12.0	11 (0 to 119)
TB lung suspected	31	19	50	12	8	25.8	23 (0 to 109)
TB meningitis suspected	29	3	33	9	3	10.3	39 (0 to 86)
TB extra pulmonary	12	1	13	0	0	0	38 (1 to 119)
Total	180	30	210	101	24		

IPD TB demographics (first diagnosis)

	Total number	**< 5 : 5 +**	**Male : Female**	**Burma : Thai**
Patients – TB sputum confirmed	108	1:99	7:3	2:1
Deaths – TB sputum confirmed	13	0:100	3:1	2:1

Note: The data for children less than 5 years, are probably underrepresented, since it is sometimes difficult to obtain sputum samples from young children**.**

The number of TB cases and fatalities have increased over the last three years in the below table. There were no confirmed TB fatalities in 2002, but there were 13 TB sputum confirmed fatalities in 2004. These fatalities occurred within the first month the patients were admitted and started on treatment. (12 deaths occurred within 2 weeks and 1 occurred in 3 weeks). These fatalities may illustrate access issues in the community. If a TB patient dies within one month after starting treatment, it is generally considered that late presentation was the greatest factor in the cause of death, rather than the treatment given. Future plans to address this increasing trend would include intensified case finding for TB prevention for patients that have coughs.

Trend of TB cases & mortality.

	2003	2004
Suspected cases referred to MSF	578	735
Confirmed TB cases (from MSF report)	197 (34%)	234 (32%)
TB cases in IPD (confirmed & suspected)	135	210
TB deaths in IPD (confirmed & suspected)	10 (7.4%)	24 (11.4%)

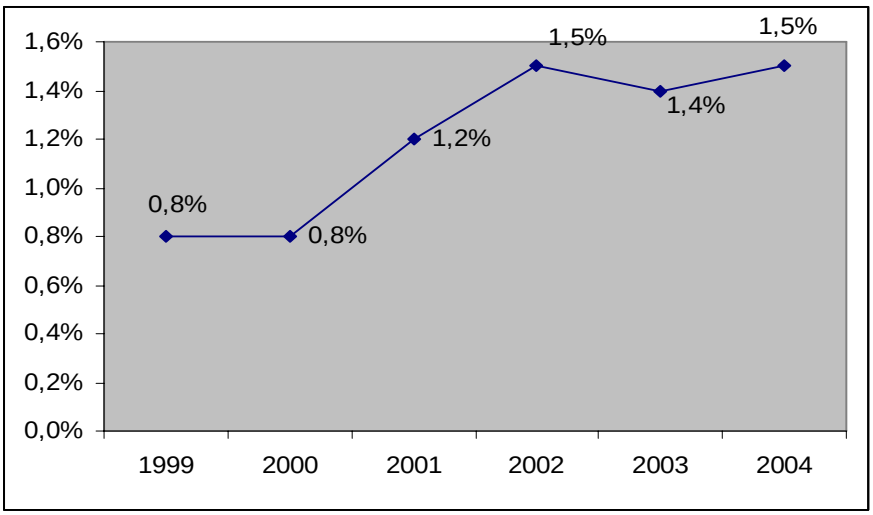
HIV/AIDS

HIV/AIDS is an increasing concern at our clinic. HIV prevalence is high in ANC clients screened. HIV prevalence has almost doubled, from 0.8% to 1.54%, among ANC pregnant women screened over the last 6 years. For adults, (age 15 to 49), the Thai national HIV prevalence is 1.5% and the Burma reported HIV prevalence is 1.2 % (UNAIDS[10], 2004). Our ANC prevalence rate falls close to these values. However, using either the Thai and Burmese prevalence we estimate there are between 1,800 to 2,250 persons living with HIV/AIDS in our catchment population of 150,000 persons.

The Voluntary Confidential Testing and Counseling (VCT) prevalence during 2004 was 14.8%. This is higher compared to the ANC prevalence. Since, ANC prevalence can be considered closer to general (young) population screening, while VCT clients are in a high risk category for those who think they may have had exposure to the disease.

Trend of HIV prevalence in ANC

pregnant women at MTC from 1999 to 2004



Our service delivery areas for HIV/AIDS include prevention, opportunistic infection treatment, and a caring and supportive environment. This involves many different activities. To enhance our constrained capability of providing comprehensive care outside in the Mae Sot community, we network with local Burmese and international NGOs[11] who provide HIV/AIDS community services for migrants, IDPs, and victims of human trafficking.

In November 2003, through the assistance of FHI[12], we started a Voluntary and Confidential Counseling and Testing program (VCT). In 2004, the VCT program pre-counseled 740 clients, and a 110 were found to be positive. Greater than 95% agreed to take testing after pre-counseling, and 72% came back for their results. In addition, ANC consented screening for pregnant women takes place.

Unfortunately, the clinic does not have Anti Retroviral HIV/AIDS drugs to treat clients who are positive for HIV. Clients who test positive in VCT or ANC receive follow-up counseling, condoms, medicines for opportunistic infections, and psychosocial support. As supplies permit, clients in the HIV follow-up program are also provided with soap, oral rehydration solution, and nutritious food. The counselors assess the patients need for hospitalization and referral. Persons suffering from exacerbations or the final stages of AIDS are seen in the HIV Outreach program, where our staff visit the patients in their homes and provide the necessary care and support. Some patients in their final stages arrive in IPD for end-of-life hospice care.

To help prevent HIV transmission to infants during and after pregnancy, ANC clients who test positive for HIV are seen in the Preventing Mother to Child Transmission Program. In this program, pregnant mothers and infants are given Neveripine or Zidovudine and infants are given breast milk formula for at least one year to substitute for breast-feeding.

In 2004, 2,736 (66%) of total ANC clients were screened for HIV. 42 clients were found to be HIV positive, and of these, 30 clients (or 71%) received Niveripine or Zidovudine.

Also, in 2004, 48 ANC clients were positive from 2003 or earlier in the year. Out of these patients, 26 (62%) mothers and their babies were alive after a year and 17 clients (41%) did not return and were lost to follow up. There were five known deaths – 2 babies and 3 mothers. Twelve infants returned for HIV testing at age one, and all of these children were HIV negative.

In 2004, seven health workers in Medical and RH OPD received specialized training to see all STI[13] outpatients and to deliver comprehensive treatment and health education. There were 391 outpatient STI cases seen at MTC from the time of the program's inception in April. Patients with STIs are more likely to acquire HIV, so providing comprehensive STI care helps with HIV reduction.

HIV infection often makes clients susceptible to TB and intensified case finding and treatment of TB among these patients is one of our goals. Of 62 confirmed HIV/AIDS patients in IPD there were 6 confirmed TB patients and 6 suspected TB patients. Of 31 suspected HIV/AIDS patients in IPD there were 5 confirmed TB patients, and 4 suspected TB cases.

Demographics of confirmed HIV/AIDS cases and fatalities for IPD patients.

	Total	% Male	% Female	%Burma resident	%Thailand resident
Cases –HIV/AIDS confirmed	61	65%	35%	53%	47%
Mortality –AIDS Confirmed	24	75%	26%	38%	62%

A comparison of comprehensive HIV/AIDS program service delivery activities to MTC activities, 2004

Areas	Comprehensive Service Delivery Activities	Mae Tao Clinic Activities in 2004
Prevention	Health Education via clinic site, mass media, and community outreach.	Individual counseling for patients. World AIDS Day activities took place at MTC with plays, demonstrations, music. Factory workers & students encouraged to attend. Mass media activities include pamphlet distribution. Extensive community outreach activities constrained
	Youth health education	'Adolescent Health Education' on HIV, STI, condoms etc., taught to aprox. 40 adolescents at a local migrant school & MTC. 35 MTC staff attended workshop on Adolescent Health Education. We plan to expand the program next year.
	Condom Distribution	25,000 condoms distributed on MTC site.
	Prevention Mother to Child Transmission Therapy	30 pregnant women treated with ARVs in the PMTCT program.
	STI Diagnosis & Treatment	In 2004, 7 health workers specially trained to see all MTC STI outpatients for comprehensive care.
	Post Exposure Prophylaxis	ARVs[14] not available for staff or SGBV[15] pts
	Blood Transfusion Safety	All blood donations are screened by MTC. Positive and indeterminate tests are confirmed by Mae Sot Hospital. Also, 32 staff attending a training workshop on 'Blood collection and transfusion'.
	Universal Precautions	Universal Precautions taught to all clinic staff in basic training.
	Voluntary Counseling and Testing	VCT program started. 740 clients were pre-counseled and 110 (14.8%) were found to be positive.
	Outreach	25 factory workers from Mae Sot attended MTC training workshop on becoming community HIV/AIDS volunteers
	High risk groups targeting – sex workers & drug users	No current targeted activities. High risk patients seen individually.
	HIV Anti-retroviral therapy	ARV therapy is not available for our patients.

Treatment	Prophylaxis and treatment for opportunistic infections	One specially trained health worker sees all HIV outpatients for opportunistic prophylaxis & treatment. Inpatient treatment done by departments.
Care & Support	Care for HIV/AIDS patients and their families	Support given for clients who test positive at MTC site and some in outreach program. Also, IPD provides hospice care for persons with AIDS.
	Home Based care	No current Home Based Program. But about 30 or 40 clients from the PMTCT & VCT seen in Outreach Program. (We were able to start a Home Based program in 2005)
	Orphan care	We provide short term care for some orphans at our clinic, while some are referred to a local Burmese Women's NGO for long-term placement.
Supportive environment	Stigma reduction activities	Ongoing education at MTC World AIDS Day held at MTC.
	Advocacy issues for persons living with HIV/AIDS	7 MTC staff attended the UN HIV/AIDS 2004 Conference in Bangkok and presented on migration, HIV/AIDS stigmatization and access to health services.
	Self support group meeting among people living with HIV/AIDS	Monthly meeting and social activities for HIV positive clients and their families
HIV / TB	Intensified TB case finding for persons living with HIV/AIDS	Clients suspected as having TB are referred to MSF for confirmation and treatment.

6. Child Health

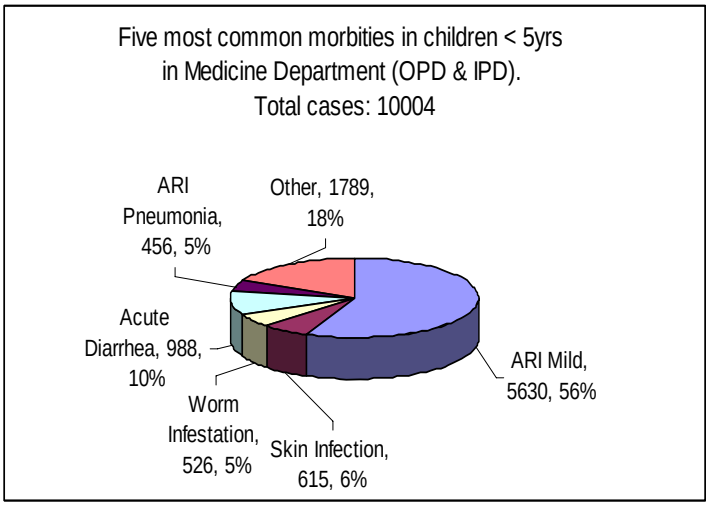
Our Child Health Services offers the following programs in our efforts to promote child health and curative care for children ages 1 month to 12 years old:

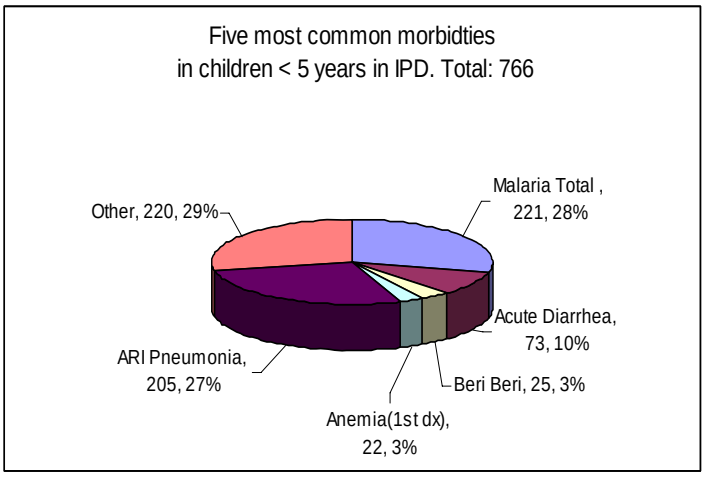
- Medical & curative care
- Immunizations
- Vitamin A
- De-worming
- Child growth monitoring
- Nutrition assessment & feeding program
- Migrant school health visits
- Health education

Medical and Curative Care

Most child health cases and prevention activities were seen in Child OPD, and severe cases are referred to Child IPD. Child OPD saw 11,376 cases and Child IPD saw 1,178 cases in 2004. The morbidity and mortality tables for child age groups were presented earlier. A comparison of OPD and IPD cases for children less than five years. ***(see the table below)***

Common cases for Children 1 month to 5 years in Medicine Department and IPD





Growth monitoring and Nutritional Assessment

Nutrition is often the cornerstone of good health, so growth monitoring and nutritional assessments are conducted with each visit.

Unfortunately, a number of children we screen are found to have moderate or severe malnutrition.

Children with moderate malnutrition are placed on a supplementary feeding program with follow up visits. Children with severe malnutrition (weight for height < 70%) are admitted in Child IPD, where medics follow the WHO[16] protocol for treatment.

37 children (first diagnosis) and 3 children (second diagnosis) were admitted for severe malnutrition. Some children arrived in desperate conditions and nine died (1st day). However, others gained weight and were discharged in a better state. The most common underlying causes are extreme poverty, birth of a sibling in the previous months, and working mothers. Malnutrition is often associated with other heath conditions. Of the 'first diagnosis' cases, two children had suspected TB. All three of the 'second diagnosis' cases had TB (two confirmed cases and one suspected case).

The following tables display the nutritional status of children for Child OPD visits (with the severe malnutrition cases in Child IPD added). Overall, about 39% of the visits in Child OPD for children under 5 years are associated with some form of malnutrition. The number of severe malnutrition cases have fluctuated, but generally remained the same (though the trend of moderate malnutrition is not available, since severe cases follow moderate). More children in Burma (70%) were affected by severe malnutrition than children residing in Thailand (30%).

Nutritional Status for Child (age 1 month to 5 years) Visits in Child OPD

(with severe malnutrtion for Child IPD and Child OPD combined)

	Total Visits	% Well	% Mild	% Moderate	% Severe & Number
Total	9550	61%	32%	7%	0.6% (61)
Burma	3752	57%	33%	9%	1.2% (45)
Thailand	5798	63%	31%	6%	0.3% (16)

Note: The percentages for Well, Mild, Moderate are likely to have a slight under-estimation since there are about 400 IPD child cases which are not reported for the total for the Well, Mild & Moderate cases, and these admitted children are more likely to be Moderate or Mild cases.

Trend of IPD servere malnutrition cases (first diagnosis)

	2002	**2003**	**2004**
Severe malnutrition cases	38	44	37
Severe malnutrition deaths & case fatality	10 (26%)	9 (20%)	9 (24%)

Demographics of Severe Malnutrition cases in IPD (first diagnosis)

	Total Number	**< 5 : > 5**	**Male : Female**	**Residence in Burma : Thai**
Cases - Malnutrition – severe	37	6 : 1	3 : 2	2 : 1
Deaths - Malnutrition – severe	9	7 : 2	3 : 1	3 : 1

Vaccination, Vitamin A, and De-worming program.

Child OPD provides immunization twice a week. Thai Public Health Department donates DPT, OPV, measles, and BCG vaccines to our clinic. However, Hepatitis B vaccine is not donated freely. Since a large percentage (6.9%) of all ANC clients screened were Hep B positive, we provide Hep B vaccine freely to their children. Regrettably, to sustain this program we have to charge parents 50 baht for infants whose mothers were not Hepatitis B positive.

Immunizations given at MTC during 2004:

Immunization	< 1 year	> 1 year	Total
BCG	1700	81	1781
DPT+OPV 1	1 518	127	1645
DPT+OPV 2	1 013	66	1079
DPT+OPV 3	811	38	849
Booster	0	274	274
Measles	595	111	706
HepB 1	384	26	410
HepB 2	291	28	319
HepB 3	70	14	84
TT1 (pregnant)	0	4 371	4 371
TT2	0	2 195	2 195
TT3	0	24	24
TT Total	0	6590	6590
Vitamin A	5301	8248	13549
De-worming	1520	6585	8105
Child OPD cases			11376

In 2003, we started our Vitamin A and De-worming program to deliver medications every 6 months to children under 12 years old at MTC and migrant schools. Vitamin A deficiency appears among children in our community and can be a cause of blindness and slow recovery from severe respiratory infections. De-worming with antiparasitic medications helps to prevent anemia.

Health Education

Child health services uses visits as an opportunity to teach parents about breastfeeding, supplementary feeding, oral rehydration therapy, diarrhea prevention, family planning, and the importance of immunization. A health worker also teaches selected topics on immunization days. Staff from MTC visit Mae Sot Hospital twice a week to provide education and conseling to Burmese mothers during post natal period.

School Health

MTC clinic and partner organizations started a Migrant School Health Program to reach migrant children in the community and provide preventive health care. We provide 6 monthly vitamin A prophylaxis and de-worming treatment and eye screenings for children 4 to 12 years old. The clinic, also coordinates the school health curriculum and

workshops every three months. 2,311 children in roughly 30 migrant schools were visited during 2004, a 54% increase over the previous year.

7. Communicable Disease Surveillance

Communicable diseases recommended for 24 hour reporting

Disease under surveillance	Number of cases In 2004
Cholera	None Reported
Meningococococcemia	None Reported
Diphtheria	None Reported
AFP/Suspected Polio	None Reported
Anthrax	1 skin suspected
Typhoid	51 (suspected)
Filariasis	2 patients with a previous history
Abnormal cluster of the diseases in special surveillance	Food poisoning occurred in 1 factory in more than 100 cases admitted at MTC.

The previous year, a pilot study between MTC and Thai Public Health Department attempted to have a comprehensive reporting sytem. The surveillance program required close follow-up of patients diagnosed or suspected of having these diseases. One constraint was the challenge of attaining accurate patient personal details and written addresses due to the migrants' concerns about their legal status in Thailand. This study indicates that commitment and collaboration by both Burmese and Thai sides are necessary for long-term prevention and control of communicable diseases.

8. Surgical Department

The MTC's surgical department has three main sections. A daily OPD clinic treats minor surgical cases and other problems such as superficial wounds and dressings. The Dental Clinic provides simple dental procedures and oral preventive health education twice a week. The Inpatient facility manages trauma emergencies or postoperative care of patients requiring more intensive and invasive treatment. Minor operations and elective hernia repairs are performed in a small operating room and an autoclave is used for sterilizations. The department is staffed by seven health workers and a volunteer surgeon visited for six months and provided training and surgical support.

The Clinic has witnessed a decrease in the number of work-related accidents, and war casualties. However, there has been an increase in burns, motor vehicle accidents, and cases of injury caused by violence.

During 2004, there were 8,187 surgical OPD cases, 420 surgical IPD admissions, and 104 referrals. This is an increase in surgical activity of 47% compared to 2003 and of 123% from 2002. Approximately 20% of patients served by the Surgical Department are children 12 years or younger.

The team sees an average of 80 patients per day (including dental services). The growth in caseload is an increasing concern for the Department when weighed against current staff and resource constraints. The limited space and number of beds in the surgical inpatient facility is also a further concern, given the burgeoning caseload.

Approximately 45% of OPD cases and 17% of IPD cases served by the Department are for female patients. Included are procedures for conditions such as breast abscess. The need to create more incentives to attract female medics to the Department, particularly to assist with female patients, is also recognized by the Department. The Department also works with and receives referrals from the Reproductive Health Department on maternal- and family planning-related services such as vasectomy and Norplant removal.

Caseloads in Surgical OPD and IPD

Case	OPD cases	IPD cases	Total
Non-trauma	4450	360	4810
Dental care	2582	1	2583
Work accident	770	35	805
Motor vehicle accident	160	0	160
Injury from Violence	102	0	102
Burns	91	7	98
War casualty	32	17	49
Total	**8187**	**420**	**8607**

Work accidents compromise the largest proportion of trauma cases. In 2004 there was a 198% increase in OPD cases as compared to the previous year. The vast majority of the patients are males, involved in such occupations as lumbering or construction. The clinic recognizes the need for increased education and advocacy to support occupational health in the migrant community.

There has also been an increase in the number of burn cases, many of which are on small children. The increase in burn cases among children is in large part attributable to parental neglect or lack of proper caretaking by parents who work long hours.

The surgical department is also seeing an increasing number of trauma cases resulting from violence and abuse. The Department recorded a total of 102 injuried by violence in 2004, which is 46% increase from 2003 and over three-fold increase compared 2002. During the past year, three medics from the surgical department underwent training to provide counseling services in an effort to help with the growing number of domestic violence cases.

Surgical procedures performed by the Surgical Department in 2004.

Procedure	**2003**	**2004**
Dental extraction	NA	1802
Absess drainage	NA	229
Excision (lump/cyst)	40	66
Bassini repair (hernia)	97	145
Diagnosis biopsy	30	50
Stitching/suture	NA	45
Jaeboulay (hydrocele)	37	73
POP (6' – 4 ')	10	47
Norplant removal	NA	8
Aspiration	NA	8
Circumcision	32	14
Vasectomy	30	22
Amputation	3	0
Stump revision	4	14
Haemaroidectomy	10	NA
Skin grafting	NA	3
Spinal anesthesia	NA	20

9. Reproductive Health Department

Reproductive Health department provides comprehensive services for women, men, and newborn babies. There are twice weekly trainings and ongoing medical supervision by senior medics and a volunteer physician.

RH department provides routine Perinatal Care for pregnant women (obstetrical patients). However, if these women have problems, they are seen in RH OPD or referred to RH IPD for emergency obstetrical care. In addition, women who are not pregnant are seen in RH OPD or IPD for gynecological problems and other medical problems. RH IPD also treats Neonatal problems. There were 3,570 GYN[17] & OB[18] and Neonatal problem cases seen by RH OPD and IPD departments. Furthermore, RH department provides preventive care and outreach services. These activities are outlined in the table below.

Routine Pregnancy Care (perinatal care)		RH Problem Cases & Treatment (pregnancy & non-pregnancy related)				RH Prevention, Counseling & Outreach services	
			OPD	IPD	Total		
		Malaria	12	189	201		
		STI	391	0	391		
		UTI	15	98	113		
		Other Medical Problems	1356	256	1612		
ANC (OPD)	4122 clients	Post Abortion Care	106	435	541	Family Planning (OPD)	7534 visits
Delivery (IPD)	1704 clients (1602 deliveries; 102 referrals)	OB cases ▪ Problem during pregnancy ▪ Problem during postpartum ▪ Problem during delivery	 ▪ 17 ▪ 12 ▪ 0	 ▪ 57 ▪ 51 ▪ 220	 ▪ 74 ▪ 63 ▪ 220	HIV MTCT Clients	30
		OB Total	29	328	357		
		GYN cases	146	45	1687		
PNC (OPD)	1081 clients	Neonatal cases	33	131	164	Traditional Birth Attendant Support	14 TBA training sessions for 140 TBAs
			2088	1482	3570	Care for Sexual Gender based violence clients	Not documented
RH total: The RH dept saw 10,084 (est.) clients involved in 21,878 visits							

Routine Perinatal care.

Our services for pregnant women include Antenatal Care (ANC), delivery, and Post Natal Care (PNC). We estimate there were 4,931 different clients who came, for either one or all, of these services.

ANC

The antenatal program focuses on four main areas:

- Risk Screening: for HIV, Hepatitis B, syphilis, malaria, and anemia
- Early detection of danger signs of obstetrical emergencies and referrals
- Health Education and Counseling
- Routine Prevention: anemia, malaria, tetanus, and HIV Mother to Children Transmission Prevention.
- Clients given Folic Acid, Ferrous, Thiamine medications and Tetanus immunization prophylactic.

There were 4,122 ANC clients seen, which was a 28% increase in clients over the previous year. We aim to increase the number of ANC visits per client; 74% of clients who came for delivery at MTC also came to our clinic for at least two ANC visits. The average age of ANC clients was 26 years old and the typical age was 20 years. Twenty-two percent of cases were teenage pregnancies (less than 20 years old) and the youngest was 14 years old.

The ANC program provides routine consented screening for HIV, Hepatitis B, syphilis, malaria, and anemia. There were 2,736 clients screened, 42 (1.5%) clients were HIV positive, 44 (1.6%) were VDRL positive, and 188 (6.9%) were Hepatitis B positive. Clients positive for HIV are treated in the Mother to Child Transmission program. The details of these programs are presented in the HIV/AIDS section of this report. A large number of mothers were also positive for Hepatitis B, and their children were given Hep B vaccine by the clinic.

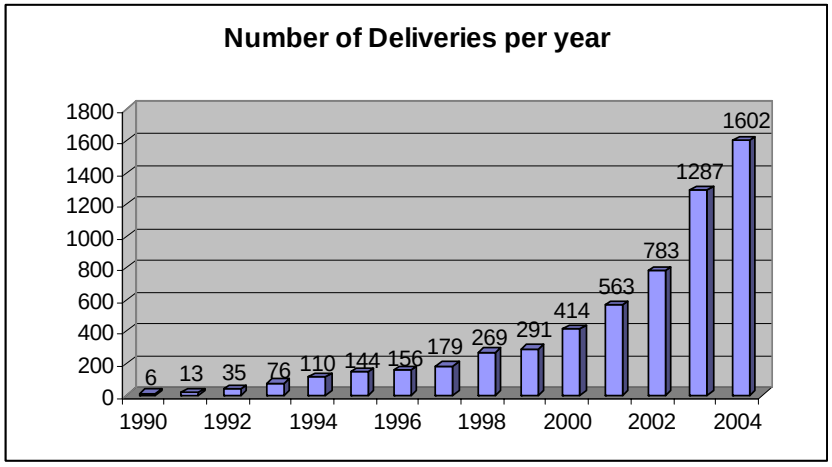
3.2% of pregnant women screened had malaria and all of these patients were treated in RH IPD. A high proportion, 68%, of pregnant women screened on their first ANC visit were anemic (by WHO definition of ^{19}HgB < 11g/dl in pregnancy). For this reason, we routinely provided ferrous and vitamins to pregnant women.

Delivery

There were 1,704 delivery admissions at MTC in 2004. Of these, 1,602 patients delivered at MTC and 102 were referred to Mae Sot Hospital because of complications. There were 1,592 live births (including twins). The average ‘deliveries per day’ was 4.4 patients. The deliveries in 2004 at MTC are a 24% increase over the previous year. Among the clients who delivered at MTC: 12.7% of newborns were low birth weight (less than 2500 grams); 70% of delivery clients received at least two tetanus doses; and 11% of women delivering had no prenatal care at MTC.

4,122 women came for ANC visits, while 1,704 came for skilled provider delivery at our clinic. The reasons for this difference may be due to access problems, traditional home delivery, and delivery at other health institutions. Immediate clinic access may be a problem at the time of labor because of security or travel costs. However, women who are high risk or have danger signs are counseled to return to MTC for delivery or are admitted prior to labor pain. In addition, many women traditionally deliver at home. Due to this, we train, along with other organizations, Traditional Birth Attendants on clean and safe deliveries and emergency referrals.

Number of deliveries performed at MTC (not referred)



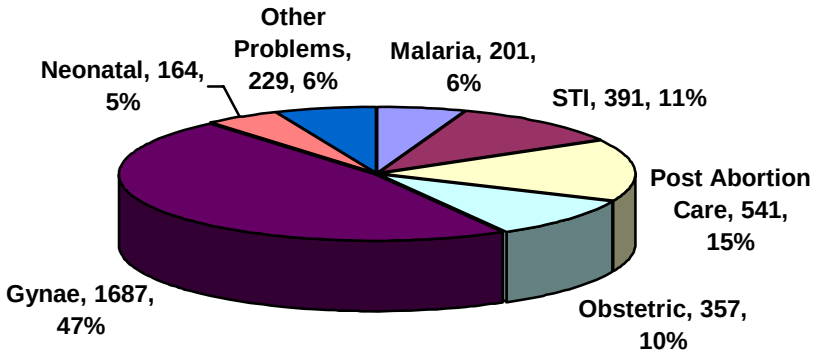
Post Natal Care

1,081 clients came for PNC visits during 2004. In addition to medical check-ups and counseling, PNC clients are routinely given Vitamin A (which is absorbed by breastfed infants), ferrous sulfate and folic acid for one month, and anemia screening. We aim to give BCG and Vit-A to newborns and Hepatitis B vaccine as in the previously stated protocol.

Obstetric and Gynecological Complications

Both obstetrical and gynecological problems are seen in RH OPD and IPD. There were 3,570 cases seen. Of these cases, 10% were obstetrical, 47% were gynecological, 5% neonatal, 12% medical problems, and 11% sexually transmitted infection.

Obstetric & Gynaecological Complication



There were 195 referrals, which was 5.4% of total cases.

Post-abortion Care (PAC) was the obstetrical complication responsible for the most RH IPD (non-delivery) admissions. There were 435 cases and 29% of RH IPD (non-delivery) admissions were due to PAC. The clinic does not perform abortions, but treats abortion complications such as sepsis or bleeding. PAC clients receive emergency care, are screened for anemia, and offered family planning counseling and supplies. It is hoped our increased family planning efforts will decrease PAC cases due to induced abortions. It is difficult to estimate the percentages, but it is believed that about two-thirds of PAC cases are miscarriages while about one-third are induced.

There were 201 malaria cases. It was the most common RH IPD complication during ANC and responsible for 13% of all RH IPD (non-delivery) admissions. Prolonged labor, at 72 cases, was the most common complication during delivery.

There were 27 stillbirths, 21 neonatal deaths, and 4 maternal fatalities out of an estimated 7,237 different patients who visited perinatal and RH OPD and IPD departments. In the previous year, there were 20 stillbirths and 3 maternal deaths. Most stillbirths and neonatal deaths are said to have occurred among women who delivered at home (or had intrauterine stillbirths). The most common causes of neonatal mortality were neonatal sepsis and prematurity. Neonates are vulnerable at this early age and this is reflected in the high case fatality rates. The causes of the four maternal deaths include severe malaria, pulmonary edema, and two hemorrhage cases. One hemorrhage case occurred with an 18 year old patient who had delivered at home. The other occurred with a post-abortion care patient. Another patient, who was referred, died at Mae Sot Hospital of uterine hemorrhage (non-pregnancy related).

Obstetrical and Gynecological Cases

Problems during ANC care	OPD	IPD	Refer	Totals
Malaria	12	188	1	201
UTI	15	96	2	113
Pre-eclampsia/eclampsia	1	39	1	41
APH	16	0	3	19
Gastritis in preg.	0	17	1	18
PPROM	0	8	0	8
Threaten labor	0	6	0	6
Subtotal	**44**	**354**	**8**	**406**
Total ANC patients				**4122**
Problems During Delivery	**OPD**	**IPD**	**Refer**	**Totals**
Prolonged labor	0	55	17	72
Post-Partum Hemorrhage	0	53	0	53
Previous c-section	0	9	19	28
Obstructed labor	0	0	20	20
Pre-eclampsia	0	9	4	13
Placenta previa	0	0	12	12
Eclampsia	0	3	8	11
Retained placenta	0	6	1	7
Malpresentation	0	0	4	4
Cord prolapse	0	0	3	3
Fetal distress	0	0	3	3
Placenta abruption	0	0	2	2
Shoulder dystocia	0	1	0	1
Other	0	0	9	9
Subtotal	**0**	**136**	**102**	**238**
Total Del. patients				**1704**
Post-Abortion care	**OPD**	**IPD**	**Refer**	**Totals**
Post-Abortion care	106	432	3	541
Subtotal	**106**	**432**	**3**	**541**
Problems during postpartum	**OPD**	**IPD**	**Refer**	**Totals**
Puerperal sepsis (metritis)	5	20	0	25
Pre-eclampsia	0	12	0	12
Breast abscess	3	7	0	10
Epi. infection	2	4	0	6
Mastitis	2	4	0	6
Eclampsia	0	4	0	4
Other	17	46	17	80
Subtotal	**29**	**97**	**17**	**143**
Total PNC patients				**1081**
Neonatal Problems	**OPD**	**IPD**	**Refer**	**Totals**
Total cases	**33**	**126**	**5**	**164**
Gynecological problems	**OPD**	**IPD**	**Refer**	**Totals**
Peri-menopausal	86	9	0	95
Dysfunctional uterine bleeding	44	14	0	58
Tumor-myoma/ovarian	8	0	17	25

Cervical CA	3	7	15	25
Uterus prolapse	5	2	14	21
Ectopic pregnancy	0	3	7	10
Molar pregnancy	0	4	4	8
PID	0	6	0	6
Imperforate hymen	0	0	3	3
Other	1339	97	0	1436
Subtotal	**1485**	**142**	**60**	**1687**
	OPD	**IPD**	**Refer**	**Total**
Total	**1697**	**1287**	**195**	**3179**

- STI cases are 391 cases (females and males)

Neonatal total morbidity and mortality:

Neonatal Problems	OPD	IPD	Refer	Deaths	Totals	% of all Neonatal problems	Case Fatality-RH IPD
Neonatal sepsis	0	32	3	7	35	21%	20%
Other	6	27	0	3	33	20%	
Jaundice	7	18	0		25	15%	
Umbilical infection	7	11	0	1	18	11%	6%
Prematurity	0	16	1	6	17	10%	35%
Skin infection	7	6	0		13	8%	
Diarrhea/dehydration	5	5	0	2	10	6%	20%
Bowel obstruction	0	5	1	1	6	4%	17%
Feeding problem	0	2	0		2	1%	
Congenital problem	0	2	0		2	1%	
Resp. distress	0	2	0	1	2	1%	50%
Eye infection	1	0	0		1	1%	
Subtotal	**33**	**126**	**5**	**21**	**164**	**100%**	**12%**

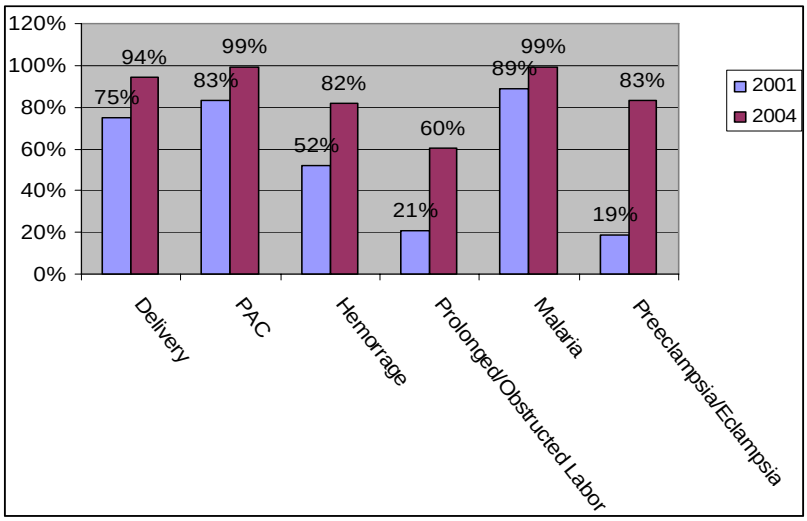
Note: This neonatal populations includes mostly mothers who delivered at home as well as some who delivered at MTC.

Referrals

There were a 195 referrals, which was 5.4% of total cases during 2004. Obstetrical cases were responsible for 130 referrals; gynecological cases resulted in 60 referrals; and neonatal cases resulted in 5 referrals. Obstructed labor was the most common obstetrical referral while tumor was the most common gynecological referral.

We are working to increase our capacity for RH cases, and overall we are treating more patients at MTC and referring less to Mae Sot Hospital.

Percentage of Obstetric complications treated at MTC and not referred



Family Planning

Family planning is another important component of the reproductive health services we offer. There were 7,534 family planning visits and 4,520 estimated family planning clients. Out of the 21,625 women of reproductive age (age 15 to 45) who came to MTC during 2004, we estimate that 21% of them visited family planning counseling and 18% accepted family planning supplies at least once. (However, these percentages may be a slight underestimate since they include women regardless of whether they are in union or not.)

In the Mae Sot border area there is a high number of abortions and unwanted or mistimed pregnancies. Some women with unwanted pregnancies abandon their infants at the clinic. MTC provides counseling and contraceptives for women who seek RH services at the clinic or through the outreach family planning program and traditional birth attendants.

PAC[20] cases may be due to either miscarriage or induced abortions. Through counseling and contraceptives we hope to reduce the number of induced abortions and unwanted pregnancies. It is difficult to evaluate this but the table below shows an increase of family planning visits. There was a decrease in the percentage of PAC cases compared to deliveries.

Comparison of family planning and post abortion care

	2001	**2002**	**2003**	**2004**
% PAC to Deliveries Admission (inc referrals)	61%	ND	40%	32%
Family Planning Visits	3723	3966	6469	7534

Family Planning Visits for 2004

			Total	Percentage
Method	Pills	New	881	54%
		Old	753	46%
	Depo	New	1434	42%
		Old	2012	58%
	IUD[21]	New	1	
	Condom	New	684	62%
		Old	414	38%
	Sterilization	Female	184	89%
		Male	22	11%
	Fertility Counseling		935	
	Emergency Contraception		26	
	Other		32	
Quantity Given	Condoms		25000	
	Contraceptive Pills		4526	
	Depo (contraceptive injection)		3419	

Trend of Selected RH Indicators

		2001	2002	2003	2004
1	% of live births with low birth weight <2500 gm	20%	18%	13%	12.7%
2	% of teenage pregnancy at ANC (<20 yrs)	23%	26%	21%	22%
3	% of delivery patients with no ANC visits	NA	10%	9%	11%
4	% of delivery patients with at least 2 tetanus doses	65%	NA	66%	70%
5	% of ANC clients screened for malaria at 1st ANC visit	NA	NA	NA	81%
6	% of delivery client referrals to Mae Sot Hospital	NA	NA	14%	6%
7	% of pregnant women Hb <11gm/dl at 1st ANC visit	NA	NA	NA	68%
8	% of women who received Ferrous Sulfate and Folic Acid (3 months) and Vit-A (single dose) during the peurperium	NA	NA	NA	95%
9	% delivery client attended at least 2 ANC consultation at MTC	NA	NA	NA	74%
10	% of ANC client who delivered at MTC	NA	NA	NA	60%
11	% of delivery clients returned for at least 1 PNC visits	NA	NA	NA	52%
12	% of PAC who received family planning conseling and contraception within 2 weeks	NA	NA	NA	> 90%
13	% of PAC clients received MVA / D&C had procedure within 24 hrs	NA	NA	NA	> 90%

The table above shows trends of significant indicators over the last 4 years. Low Birth Weight is an important indicator and is the single most important predicter of newborn well-being and survival (Measure, 2002). LBW[22] weight is caused by poor fetal growth (IUGR[23]) and prematurity. However, the underlying health causes are often maternal under-nutrition and maternal ill health including malaria, anemia, and acute and chronic infections. A goal of some international child advocacy organizations is to reduce the

incidence of LBW cases to less than ten percent (Measure, 2002), taking into account the births in the catchment community, as well

The percentage of our LBW deliveries at MTC, even though we are referring less delivery patients to Mae Sot hospital, has been decreasing. (However, the actual number of LBW cases may have increased, since the number of live birth deliveries has increased, as well). There was a small difference in LBW percentage between bordering residents; Burma residents were 11.7% and Thailand residents were 13.1%.

10. Primary Eye Care Department

Twice a week the primary care eye department provides treatment, screening, vision testing, health education, and eyeglass distribution. The department is staffed by 7 health workers and a volunteer Optometrist.

Surgical treatment for cataracts, glaucoma, and other cases are conducted bi-annually by volunteer eye surgeons

The eye department saw 2,728 cases, distributed 1,530 eyeglasses, and provided 331 surgeries.

In addition, eye department staff visited 32 migrant schools in the Mae Sot and Phop Phra area and conducted 2,678 eye screens among the students. Of the children found to be vision impaired, half were given eyeglasses immediately, while the other students (and their instructor) were asked to come to the clinic to receive their glasses and have further testing.

Eye Department Cases

Type of Diagnosis		Total cases	Surgery	Referral
Xerophtalmia	Total	**548**	1	
Infection	Trachoma Infection	39		
	Conjunctivitis	60		
	Other Infection	22		
	Infection Total	**121**		
Surgical Cases	Cataract	351	289	
	Ptyregium	106	2	
	Strabismus	3		
	Trichiasis	4	2	
	Other surgical problems (including glaucoma)	31	26	6
	Surgical Total	**495**	319	6
Eye injuries		**34**	12	1
Eyeglasses distribution		**1530**		
Total cases		**2728**	**331**	**7**

The Eye department and partner organizations created a monitoring and evaluation work plan for eyeglass distribution, eye care training, eye surgery and migrant school visits, for different periods throughout the year.

11. Prosthetics Department

The prosthetic department provides post-operative care, prosthetic devices, and rehabilitation for landmine survivors and other amputees. The department is staffed by 4 health workers, some of whom were survivors of landmine injuries themselves.

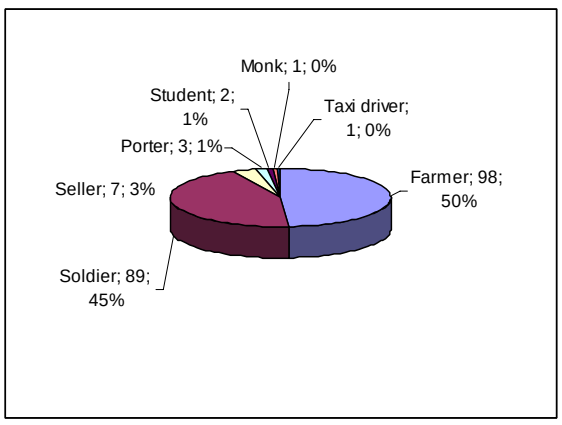
Our services complement those of Handicap International, who offer post-surgical care to landmine victims in refugee camps on the Thai-Burma border. Services in refugee camps are largely inaccessible to migrant workers and internally displaced persons. Our hope is that over time a system of mobile prosthetic clinics can be built to bring services to where the need is greatest. Training of prosthetic technicians who come from high-risk areas is one of our goals.

205 patients visited the department in 2004, and 205 prostheses were produced. Not all of these patients had suffered from recent injuries. Some clients had sustained their original injuries in the past, but were for the first time receiving a prosthesis. Other clients were returning for adjustments to their prostheses. In 2004, 17 patients appeared at our clinic with new amputations caused by landmines and they were referred to Mae Sot Hospital (through ICRC assisted funding) for emergency surgery. They were then seen in our prosthetics department following surgery.

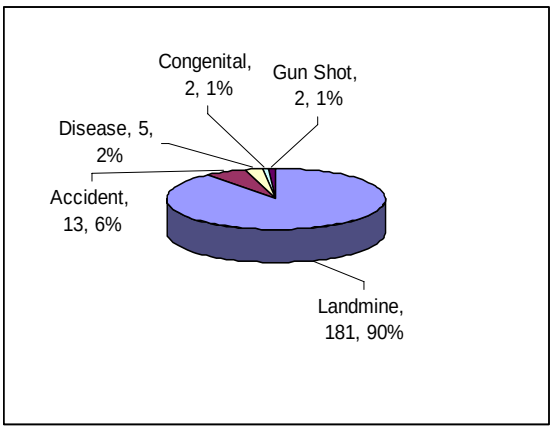
The age and gender of prosthetics patients reflect the demographics seen in the occupations most at risk for landmine injuries. 13 women and a 192 men visited the department.

As shown in the chart below, most of the patients seen were farmers and soldiers. For 181 (90%) patients landmine injury was the cause of their amputation.

Occupation of Prosthetic Patients



Causes of Amputation Injuries



12. Laboratory and Blood Bank Activities

Our laboratory testing and screening services include: malaria microscope tests, hemoglobin, HIV antibody, Hepatitis B surface antigen, Hepatitis C antibody, urine stick, syphilis (VDRL), and STI testing. Mae Sot Hospital performs other tests not available at MTC, such as complete blood counts, metabolic tests, and renal function tests. MSF performs AFB[24] sputum testing. Malaria microscope slides constitute the bulk of our laboratory work. In 2004, we processed 29,515 slides or an average of 81 per day. Most (65%) were for new cases, 35% were for treatment follow-up, and the remainder for the screening of pregnant women and blood donors. Anemia screening is done for all malaria patients, malnourished children, and antenatal patients at the first visit and again at 38 weeks.

The blood donation program activities include: assuring a safe supply, collection, screening, storage, counseling, and training in safe collection and transfusion. In 2004, there were 1,063 donated blood specimens. The majority of our blood donors are factory workers. To ensure a safe and adequate blood supply, all blood donors are screened for HIV, Hepatitis B, Hepatitis C, syphilis, and malaria. Positive and indetermined test results are sent to Mae Sot Hospital Laboratory for confirmation. Donors are given a health risk assessment and health education on HIV, Hepatitis B & C, and syphilis. Those donors wishing to know their HIV status are referred to the VCT program.

The table below shows the laboratory data for testing among ANC pregnant women, Blood donors (BD), and VCT clients. HIV and Hep B have increased among ANC clients over the years. Our plans to address these issues were discussed in the RH section and Child section.

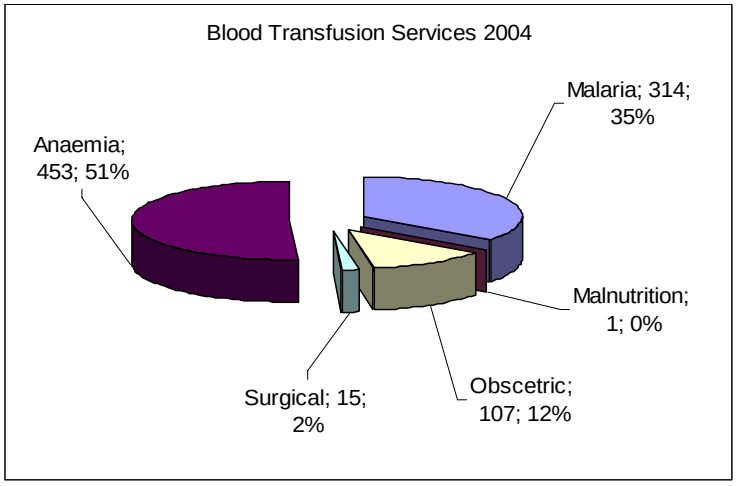
Trend of Selected Communicable Diseases from 1999 to 2004

	HIV			Hep B			Hep C			VDRL		
	ANC	BD	VCT	ANC	BD	VCT	ANC	BD	VCT	ANC	BD	VCT
1999	0.8%			4.5%						1.2%		
2000	0.8%			3.7%						1.0%		
2001	1.2%	3.2%(32)		9.4%	7.9%(87)			2.1%(21)		1.6%	0.7%(8)	
2002	1.5%	3.4%(26)		6.4%	8.7%(76)			4.9%(39)		2.7%	0.8%(7)	
2003	1.4% (35)	1.0% (10)		8.5% (209)	10.8% (113)			0.5% (5)		2.5% (61)	0.5% (5)	
2004	1.6% (42)	0.9% (9)	14.9% (110)	6.9% (188)	6.9% (73)	5% (37)		5.7% (61)		1.6% (44)	1% (9)	1.9% (14)

Note: Blood donor data should not be taken as patient population representative, since donors are risk-screened before; also, if one test is positive the other test may not be performed – for instance if Hep B / C or VDRL is positive, HIV testing is not done.

In 2004, 890 blood transfusions were given at MTC; this was an 8% increase over the previous year. The following graph shows what conditions required transfusions.

Conditions treated by Transfusions



Monitoring and Evaluation

During 2004, quality control for malaria slides was done by senior health workers who reviewed the slides of their staff. In the future MTC plans to have frequent routine quality control for malaria slides and hemoglobin readings done by an external reference laboratory such as Mae Sot Hospital. This data will be used for our monitoring and evaluation purposes.

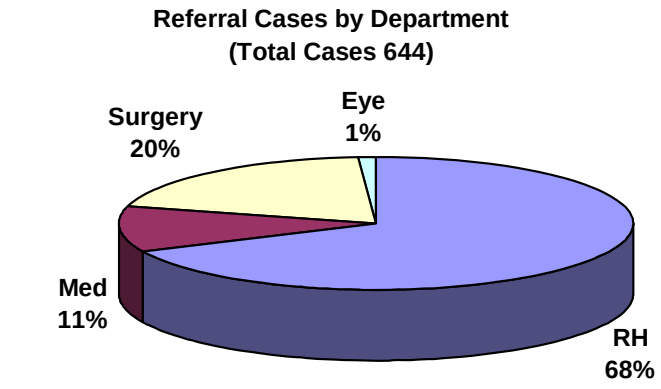
12. Referral program

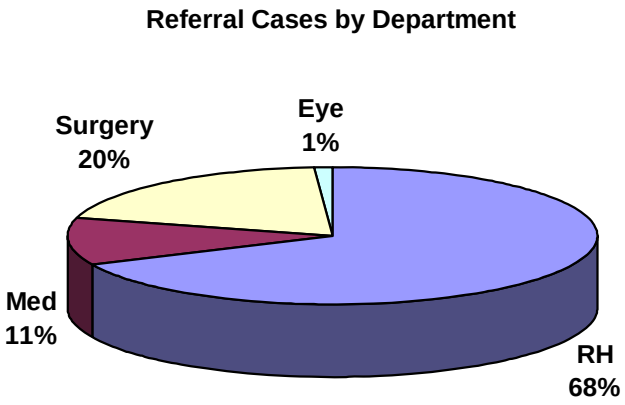
When patients require care that is either more intensive or more technological than what we can offer we refer them to Mae Sot Hospital for admission. In 2004, we referred 644 patients to Mae Sot Hospital. Of those patients, MTC could only afford to formally refer 486 patients. In this case, MTC completes a referral form, and is billed by Mae Sot Hospital. The costs for 22 war wound cases referred to Mae Sot Hospital were paid by International Committee of the Red Cross.

For 158 patients, MTC budget restrictions made referrals impossible. MTC provided patients with a lump sum of cash and were sent on to Mae Sot Hospital without a referral form. MTC is unable to document the outcome of these patients' treatment.

The majority (68%) of formal referrals were made by Reproductive Health department. Medical (IPD) referrals made up 11%, and Surgical and Eye Department referrals were 20% and 1%, respectively.

Referral Case	Case Referral by Referral Form		Cash Referral	Total Referral
	Cases	Average Cost		
Delivery Complication	85	6600	30	115
HIV (C/S and Normal)	7	7096	9	16
Non-delivery/Gynecological	70	12305	37	107
Tubal ligation	184	814	0	184
Neonatal Problems	2	5626	15	17
Medical Problems	46	13383	24	70
Surgical Problems	61	15627	43	104
Eye Problems	7	9142	0	7
War Wounded (Gun Shot)	5	25200	0	5
Landmine	19	32155	0	19
Total	**486**		**158**	**644**





14. Health Education and Counseling

Health education is provided individually to each patient. The aim of this interaction is to increase the population's knowledge and awareness of health issues and to increase the capacity of patients to better maintain their own health.

Health workers also distribute IEC[25] materials to clients, when available. One health worker serves as the IEC coordinator. A resource center was previously established to ensure client and health worker access to materials, in a variety of languages such as Burmese and Karen.

The Clinic also sponsored three health campaigns during the year: World AIDS Day, World Enviroment Day, and an Anti-Drugs Campaign.

As part of our monitoring and evaluation efforts, our plan is to conduct random patient exit interviews so that a patient's understanding of the health information provided to them in consultation may be assessed, especially for knowledge of malaria prevention and prescription drug compliance.

15. Outreach services

MTC participates in outreach services for migrants in the Mae Sot community. The details of these activities were presented in other parts of this report, but a summary of these services include:

School Health Prevention.

Thirty-two migrant schools were visited and about 2,311 students received preventive care for Vitamin A deficiency, worm infestations, vision screening, and health education. Teachers also received training on School Health Curriculum Development which they could then teach their students.

HIV Prevention

We trained about 25 HIV peer educators, most of whom were factory workers, to educate the community about HIV prevention and to distribute educational pamphlets.

In our HIV Outreach Program we provided home visits for about 30 or 40 patients who were HIV positive and suffering from exacerbations of the disease, thus too ill to come to the clinic. Next year, we plan to expand this program into a comprehensive Home Based Care Program and increase our patient visits.

For our World AIDS Day Campaign held at MTC, we invited factory workers and adolescents from migrant schools to join the event. We aimed to have at least 10 workers from each factory attend.

Traditional Birth Attendants Activities.

TBAs are traditionally women, trained to attend to pregnant women and conduct home deliveries in the community. Many mothers prefer to give birth with TBAs because of traditional beliefs, security and/or transport problems, or poor access to health education and health services. MTC, along with other local organizations, train TBAs on medical issues such as risk screening, disease prevention, maternal nutrition, clean and safe delivery, recognizing danger signs necessitating early referrals, family planning, and newborn care. During 2004, we sponsored 14 TBA training workshops and provided safe-birthing kits to attendees.

Adolescent Health Education

In 2004, we visited a local migrant school twice during the year and presented to about 40 adolescents on teen health issues. STI prevention, condom use, gender issues, and HIV/AIDS were key topics. Our adolescent reproductive health network groups in migrant areas have developed training curriculum and exchanged information regularly. We plan to expand this program during 2005.

16. Cross Border Collaboration

Back Pack Health Worker Program

MTC partners with the Back Pack Health Worker program. There are about 70 BPHW teams, who provide care to [26] IDPs in Karen, Mon, and Karenni areas. Each team consists of 3 to 4 health workers. The estimated target population for the BPHW teams is 150,000 IDPs inside Burma.

Back pack teams are engaged in curative care, health campaigns, water and sanitation projects, Vitamin A and de-worming programs, school health, and TBA[27] training and support. Health information collection and analysis, as well as ongoing medical training, are important components of the Back Pack program.

MTC collaborates with the BPWHT to provide health seminars, workshops, and trainings every 6 months.

Primary Health Care Clinics

Mae Tao Clinic maintains two primary healthcare outpatient and inpatient clinics for populations inside Burma. They are located at Pa Hite in Mutraw District (population 14,000) and La Pa Her in Pa-an District (population 2,000). They are part of the Karen Health and Welfare system. The clinics in these Karen villages serve as referral centers and inpatient facilities for the Back Pack Health Worker program. Terrain in this area is mountainous and harsh, with a long rainy season. Malaria is endemic.

Prior to 2002, the clinic and its surrounding population were forced to relocate on several occasions because of attacks by SPDC troops. In the beginning of 2004, cease-fire talks began in Karen State, and resulted in a more stable situation. Despite the increased SPDC presence in the villages, the people traveled more freely but were still anxious about their security.

In the coming year, the Thai and Burmese governments propose constructing two dams on the Salween River, which could potentially flood a number of villages in the Pa Hite area. This would affect an estimated 50,000 people. Surveys have already been conducted in order for construction to go forward.

In the health care clinics the health workers provide inpatient and outpatient medical services, traditional birth attendants (TBAs) training, nutritional care, maternal and child health, water and sanitation consulting, and school health programs. The staff also attend ongoing training at Mae Tao Clinic and participate in field workshops conducted by Back Pack Health Worker Teams.

A population survey was done of the Pa Hite area in October 2004. There were 1,627 persons sampled out of 266 households (6.1 persons per household). A volunteer epidemoligist assisted in the creation of the survey and the data analysis.

The Pa Hite Survey showed that the Crude Death Rate was 13.3 per 1000 persons. The Infant Mortality Rate was 98.7 per 1000 live births, and the Under 5 Mortality rate was 38.9 per 1000 children under 5.

Another 2004 survey was done in the La Pa Her Clinic area which is close to Pa Hite. It showed the Crude Death Rate was 39 per 1000 persons, the Infant Mortality Rate was quite high at 238 per 1000 live births, the Under 5 Mortality Rate was 88 per 1000 children under 5 years.

By contrast, the average IMR[28] for Thailand is 23 per 1000 live births, and the IMR for Burma is 76 per 100 live births (UNICEF[29], 2003). These surveys emphasize the severity of conditions inside Burma and the need for health care services.

The Pa Hite survey also showed that 26.7% (21.5 to 32.4%, 95% CI) of households had mosquito nets for their beds. While the diarrhea morbidity within the last 2 weeks was 4.2% (3.3 to 5.3%, 95% CI) persons.

The following table below shows the results of a [30]MUAC (mid-upper arm circumference) nutrition survey of children, ages 1 to 5 years, in the Pa Hite population.

Nutritional Screening survey for Children (1 to 5 years) in Pa Hite area.

MUAC (age 1 to 5)	Persons	Value and (95% Confidence Limits)
Green	155	85.2% (79.2% to 90.0%)
Yellow	24	13.2% (8.6% to 19.0%)
Orange	3	1.6% (0.3 to 4.7%)
Total	182	100.0%

OPD and IPD Case loads for the Pa Hite Clinics & its outreach servives

Item	<5	>5	Total	% Total
ARI	1287	1847	3134	22
Anemia	537	1234	1771	12
Malaria (Lab Confirm)	418	780	1198	8
Worm Infestation	506	523	1029	7
Peptic Ulcer	64	853	917	6
Skin Disease	350	489	839	6
Simple Diarrhea	381	376	757	5
UTI	211	503	714	5
Malaria Presumptive	229	384	613	4
Dysentery	243	298	541	4
Beri Beri	200	336	536	4
Surgical Non-Trauma	88	278	366	3
Surgical- Trauma	39	162	201	1
ANC visit	3	163	166	1
Hypertension	0	149	149	1
Abortion	0	93	93	1
Measles	5	8	13	0.1
STI	0	4	4	0.0
Other	134	1016	1150	8
Total	**4695**	**9496**	**14191**	**100**

OPD and IPD Case loads for the La Pa Her Clinics

Item	<5	>5	Total	% Total
ARI Mild	936	1102	2038	31
Anemia	91	831	922	
Malaria Presumptive	148	428	576	
Skin Disease	183	300	483	
Beri Beri	19	446	465	
UTI	18	303	321	
ARI Pneumonia	148	130	278	
Worm Infestation	133	132	265	
Dysentery	110	57	167	
Simple Diarrhea	92	38	130	
Surgical Problem	10	61	71	
Dental Problem	3	48	51	
Woman RH Problem	0	40	40	
CVS Diseases	0	27	27	

Vit-A Deficiency	2	11	13	
Meningitis	1	4	5	
Measles	1	0	1	
Suspected TB	0	1	1	
Suspected AIDS	0	0	0	
Others	78	603	681	
Total	**1973**	**4562**	**6535**	

16. Training and Exchange

Initial Education

The Nursing training is a 12 month program. 31 students enrolled in the Nursing training program, and classes commenced in September 2004.

The Laboratory training was conducted August through October. 10 laboratory technicians graduated.

Continuing Education

Training Title	Session	Participant	Time Period	Facilatating Org:
Leadership Training	2	51	30 hrs	HREIB[31]
Reproductive Health Seminar	2	60	20 hrs	MTC, BPHWT[32]
Primary Health Care Management Advancement Program	1	2	100 hrs	Mahidol University
Primary Eye Care Training • Backpack Health Worker • Intern Students • Nursing (A)	 • 1 • 1 • 1	 • 19 • 18 • 31	30 hrs	Dr. Jerry E. Ramos, MTC
Health Assessment Training	1	14	120 hrs	Dr. Jerry Vencent, MTC
Blood Transfusion Workshop (Shine)	1	30	30 hrs	MTC
Prosthetic Training (New Techniques)	1	11	30	Clear Path International
Integrated Management of Childhood Illness Training	1	12	30	Dr. Thein Win, BMA[33]
STI Management Workshop			12 hrs	Dr. Terry Smith
Computer Training • Basic (Windows&Word) • Upgrade (Excel&PowerPoint) • Database (Access)	 1 1 1	 24 20 16	 30 hrs 30 hrs 30 hrs	 Lin Kyaw Lin Kyaw Lin Yone, Moe Oo

Throughout the year, MTC and its partner organizations facilitated and coordinated training and exchange programs in order to improve clinical knowledge and skills, and to strengthen partnerships among various organizations and ethnic groups. We also established a record review system to organize weekly sessions in each department.

Intern Program

MTC offers internships to health workers from different ethnic group areas along the Thai–Burma border. Typically, interns complete their formal training 4 to 5 years prior to internship at various other locations, then come to the clinic for 6- to 12-months blocks. They come to obtain skills in a specific department or to rotate throughout our different departments. After receiving their training at MTC they can take their knowledge and skills into difficult-to-access areas for underserved populations. In 2004, 60 interns from different ethnic health organizations completed a 6-month internship at Mae Tao Clinic.

English Language Training

In 2004, approximately 100 staff from Mae Tao Clinic and Children's Development Centre attended the English Language training programmes. There were 5 classes, from beginner to upper-intermediate, with 15-20 students in each class. Each group of students at a particular level attended classes 2 or 3 evenings per week. The classes were taught by independent volunteers and those from Burma Volunteer Programme and Eastern Townships Education Programme. Placement exams were held twice a year so that students are given the chance to move up a level.

Conferences and Seminars

Our staff have traveled to give presentations at international conferences about health and human rights on the Thai-Burma border.

No.	Date	Conference Title	Sponsering Organization	Venue	Presentation Title	Presentor Participant
1	July 2004	13th International Conference on HIV/AIDS	UN-AIDS / MOPH	Bangkok	HIV/AIDS and Migration	Dr. Cynthia Maung
2	4-5 March, 2004	Human Security Now: International Conference, Strengthening Policy Network in Southeast Asia 2004	National Human Rights Comission, Thailand / Chulalongkorn University	Chulalongkorn University Bangkok, Thailand	Health and Empowerment: Knowledge, Skills and Education	Dr. Cynthia Maung
3	21-23 June 2004	Seminar on Communicable Disease Control	NHEC & BMA	Mae Sot , 2002	HIV Prevention and VCT service among Burmese Migrants	Shine
4	21-23 June 2004	Seminar on Communicable Disease Control	NHEC & BMA	Mae Sot , 2002	Pilot Programme on Disease Surveillance System in MTC	Lin Yone
5	18-19 March 2004	Health Collaboration Devlopment along Thai-Burma Border	WHO & MOPH (Thailand)	Chaing Mai, Thailand	MTC Presentation	Lin Yone
6	30 Nov – 1 Dec 2004	The Health Status of Border Communities in the Mekong Basin: Challenges and Priorities	Emergency Southeast Asia Network & Institute for Population and Social Research, Mahidol University	Bangkok	MTC Presentation BPHWT Presentation	Dr Cynthia Maung, Aye Lwin
4	3-5 Nov 2004	The Meeting on Malaria along the Border Area	WHO & MOPH (Thailand)	Mae Sot	-	4 participants from MTC attendant
5	5-6 Oct 2004	The Meeting on Tuberculosis along the Border Area	WHO & MOPH (Thailand)	Mae Sot	-	4 participants from MTC attendant

18. Social Services

In addition to clinical and training services, MTC offers a variety of programs geared towards community support and patient rehabilitation. The clinic's increasing role as a community center, and the continual oppression of people living in Burma, results in a demand for services not directly related to health care.

Our Social Services activities include:

Delivery Certificates
For every birth at Mae Tao Clinic we issue a delivery certificate. We also collaborate with the Committee for Protection and Promotion of Child Rights (CPPCR) to raise awareness about and provide documentation for stateless children.

Children's Development Centre
The clinic runs a school for children of migrant workers in Thailand. The children of MTC Staff also attend. In the school year 2004-2005, there were roughly 340 children attending. The school consists of a day care centre, nursery school, and primary school up to 6th standard.

Bamboo Children's Home
The clinic also supports one boarding house in the refugee camps for unaccompanied children. In 2004, there were around 140 children staying in this boarding house.

Orphan Care
The clinic supports children who are orphaned or abandoned by their parents. Poverty is a major reason for the existence of so many orphans. In 2004, the clinic supported and cared for 21 orphans. Several other cases were referred to a local Burmese women's organization, Social Action for Women, which has a programme to take care of abandoned babies and children in the Mae Sot area.

Asylum for Women and Children
The clinic also functions as a drop-in center for women and children in need of asylum. People seeking protection and support from abusive relationships frequently arrive and are accommodated at the clinic until safe alternative arrangements can be made.

Hospice and Aged Care
Patients often arrive at MTC in need of hospice care. They commonly have AIDS, cancer, or are of advanced age. Elderly persons may have no family or friends to support them. The clinic provides support for these people and takes responsibility for their care until they die, if necessary.

Funeral and cremation services:
Families of patients who die at Mae Tao Clinic may not have the funds to cover the costs for a funeral or for transport of the body back home. Mae Tao Clinic provides funds to either assist families to return the body home or conduct a small funeral at MTC. We collaborate with Mae Sot Hospital for the management of the bodies of deceased clients. MTC also provides a death certificate for the deceased.

Support of Amputees
The prosthetic department provides employment and rehabilitation services for amputees for whose injuries make it difficult to find employment.

Cultural celebrations, sports events, and health campaigns
The clinic regularly organises community events around important, traditional festivals and holidays. This is done in recognition of the importance of such events in strengthening community ties and providing a chance for friends and families to get together. In a situation where families are frequently separated and people face daily threats to their personal safety, these celebrations are important for people's mental well being.

The clinic also conducts health campaigns together with Mae Sot Hopsital and other partner organizations.

19. Partnerships

MTC works continuously with local and international health organizations, community-based organizations, individual health professionals, and the Thai government to increase effectiveness of health care along the border.

Partnership activities include referrals (both to and from MTC), training workshops and educational exchange, local outreach support, cross border health care, coordination of data collection and health information, and development of protocols for clinical diagnosis and treatment along the border.

Thai Government

- **Thai Public Health and Mae Sot hospital (technical and logistics)**
  - Vaccine
  - Special laboratory tests
  - X-ray / ultrasound facilities
  - Medical waste disposal
  - Obstetric emergency and medical emergency referrals
  - Surveillance system
  - HIV/AIDS prevention, including prevention of mother to child transmission
  - TBA training and home delivery
  - Health information systems
- **International Office of Migration (IOM)**
  - Curriculum development and training for TBAs
  - Primary eye care training from Ministry of Public Health

Local Organizations

- **Adolescent Reproductive Health Network**
  In 2004, Mae Tao Clinic continued to work with the ARHN, a network of local organizations based in Mae Sot including:
- Karen Women's Organization
- Social Action for Women
- Paluang Women's Organsiation
- Karen Youth Organization
- Burmese Women's Union
- NLD Women

The ARHN conducted a survey of adolescents in migrant, internally displaced and refugee populations. They developed training curriculum together and conducted trainings with adolescents in these target populations. Topics included gender-based violence, STIs, family planning, and leadership skills.

- **Committee for the Protection and Promotion of Child Rights (CPPCR)**
  MTC continued to work with CPPCR on raising community awareness on child rights and in particular to the right of documentation.

- **Burma Medical Association/National Health and Education Committee/ Back Pack Health Workers Team**
  MTC collaborates with these organizations to:
  - Strengthen health information systems on either side of the borders
  - Provide capacity building for health workers along the Burma border
  - Develop training curriculum
  - Develop health policy

- **Human Rights Education Institute of Burma**
- HREIB provided Child Rights training and LeadershIp training for staff and teachers at Mae Tao Clinic

- **Terre Des Hommes**
- As one of Terre Des Hommes' partner organizations, MTC participates in networking and advocacy workshops at the local and regional level to advocate specifically for: Child Rights, Against Gender-Based Violence, and Environmental Protection
- Terre Des Hommes also provided capacity building for staff in financial management.

Burma Children's Fund

- Burma Children's Fund provides support for children who are referred to Chiang Mai Hospital for lifesaving operations at Mae Sot Hospital which the children's family could not otherwise afford. In 2004, around 25 cases from Mae Tao Clinic were sent for operations at the hospital. These cases included: cardiac surgery, bowel obstruction, and imperforated anus.

We would also like to thank the following organizations and individuals for their support in 2004:

Aide Medicale International	Artesunate, Milk Powder, Surgical Supplies
Anthony Parisi (USA)	Land
Asia Transpacific Foundation (Paula and Tao) (USA)	Children's Development Centre and general Clinic costs
Australian Volunteer International	Support for international volunteers in Obstetric Emergency and Child Health Departments
Brackett Foundation (USA)	Children's Development Centre
Burma Border Projects	Technical support for mental health training and support for international volunteers
Burma Children's Fund	Chiang Mai Hopsital referrals
Burma Relief Centre (Japan)	Eye glasses
Burma Relief Centre/ Interpares/ Canadian International Development Agency	Clinic running costs (esp. IPD, OPD and Surgery)
Burma Relief Centre/ Interpares/ Just Golf	Clinic running costs (esp. IPD, OPD and Surgery)
Burma Volunteer Project	English teachers
Clear Path International (USA)	Prosthetics trainings
Consortium Thailand	Teacher training
DI-FAEM German Medical Institute	Malaria medication
Doctors of the World (USA)	Geeral Clinic costs
European Committee	English language training for staff
Family Health International (USA)	HIV/AIDS Programme
Foundation for The People of Burma (USA)	Children's Development Centre
Help Without Frontiers (Italy)	Prosthetics, Children's Development, waste disposal facilities
International Committee of the Red Cross	Landmine Referrals to Mae Sot Hospital
International Rescue Committee (USA)	Reproductive Health, Eye Care, Pha Hite, Administration, and Emergency Referrals
John Hopkins University (USA)	Health Assessment and Cross Border MCH Programmes
Karen Aid (UK)	Eye Surgery and support for international volunteer
Magsaysay Foundation (Phillipines)	Teacher training
Medical Mercy Canada	Blood Transfusion Services and intern programme
Medicins Sans Frontieres	Tuberculosis Referral
Mitwelt-Netzwerk (Germany)	Family planning supplies
New Zealand Embassy	Health Information Systems training programme
Nonna Gabriella (Italy)	Nursery School
Open Society Institute (USA)	Publications
Perinatal HIV Prevention Trial (Thailand)	HIV Testing

Planet Care (USA)	Malaria, international volunteer support, funeral costs, intern programme
Stichting Vluchteling (Netherlands)	Bamboo Children's Home, Ler Per Her Clinic, water and sanitation
Terre Des Hommes (Netherlands)	Children's Health Services
Thailand Burma Border Consortium	Food for staff and patients
Two Elephant Factory (Thailand)	Blankets
Unitarian Universalist Service Committee (USA)	Laboratory running costs
Women's Commission for Refugee Women and Children	Technical support for Adolescent Reproductive Health Project, otoscopes
Women's Education for Advancement and Empowerment	Health education materials

21. Clinic Staff

Director: Dr Cynthia Maung

Programme Managers by department:

Mae Tao Clinic Services	Training
o Inpatients – Aung Mon/Saw Muni	o Nursing Training – Saw Eh Ler Plo Doh
o Outpatients – Tar Eh/Ah Lum	o Intern Programme – Paw Ruth Say
o Surgery – Saw Beh Lay Htoo/ Saw Law Kwa	° Health Assessment – Tin Maung Latt
o Child Health Services – Naw May Soe	Logistics
o Reproductive Health In Patients - Naw Sophia	o Logistics – Aung Phe
o Reproductive Health Out Patients – Naw Htoo	o Water – Sanitation – Tin Htun
o Blood Donation Services – Naw Shine	o Food – Naw Htoo
o Preventing Mother to Child Transmission Services – Naw Ree	o Transport – Saw Sunny
o Voluntary Counselling Services – Saw Than Lwin	o Office Administration – Saw Win Tin
o Eye Care – Hla Myint/ Naw Blessing	o Accounting – Naw La La
o Laboratory – Khin Zaw/Saw Hsa K'Paw	Outreach
o Pharmacy – Naw Klo	o Children's Development Centre – Mahn Shwe Hnin
o Prosthetics – Saw Maw Ker	o Teacher Training Programme – Na Mi Bo

o Health Information Systems – Lin Yone	o School Health Project – Nay Oo
° Referral Services – Tin Shwe	o Bamboo Children's Home – Saw Kywe Poe
	° Pha Hite Clinic – Saw Kyi Soe/ Naw Pale Paw
	° Ler Per Her – Saw Ah Nge

International volunteer Programme

- **Dr Elisabetta Leonardi** – Inpatients Department
- **Kanchana Thornton** – Child Health Services and Thai Public Relations
- **Dr Jerry Ramos** – Eye Care Services
- **Dr Dan Dwyer** – Reproductive Health Department
- **Dr David Downham** – Surgical Department
- **Dr Joanne MacLean** – Outpatients Department
- **Dr Terence Smith** – Reproductive Health Department and HIV/AIDS Programme
- **Yvonne Sullivan** – Office Staff
- **Kim Czubrij** – Office Staff
- **Bronwyn Duce** – Office Staff
- **Lisa Houston** – Office Staff

21. Acronyms

[1] **SPDC - State Peace and Development Council (Burma Junta)**
[2] **KNU - Karen National Union**
[3] **MTC - Mae Tao Clinic**
[4] **EmOC - Emergency Obstetric Care**
[5] **VCT - Voluntary Counseling and Testing**
[6] **PMTCT - Prevention of Mother to Child Transmittion**
[7] **UNHCR - United Nations High Commissioner for Refugees**
[8] **ANC - Ante Natal Care**
[9] **MSF - Médecins Sans Frontières**
[10] **UNAIDS - United Nation AIDS Program**
[11] **NGOs - Non-goverment Organizations**
[12] **FHI - Family Health International**
[13] **STI - Sexual Transmitted Infection**
[14] **ARVs - Anti-retro Viral**
[15] **SGBV - Sexual and Gender Base Violence**
[16] **WHO - World Health Organization**
[17] **GYN - Gynaecology**
[18] **OB - Obstetric**
[19] **HgB - Haemoglobin**
[20] **PAC - Post-Abortion Care**
[21] **IUD - Intra Uterine Device**
[22] **LBW - Low Birth Weight**

[23] **IUGR - Intra Uterine Growth Retardation**
[24] **AFB - Acid Fast Bacilli**
[25] **IEC - Information, Education, Communication materials**
[26] **IDPs - Internal Displaced People**
[27] **TBA - Traditional Birth Attendent**
[28] **IMR - Infant Mortality Rate**
[29] **UNICEF - United Nation Children Fund**
[30] **MUAC - Mid Upper Arm Circumference**
[31] **HREIB - Human Right Education Institute of Burma**
[32] **BPHWT - Back Pack Health Worker Team**
[33] **BMA - Burma Medical Association**