

# Chronic Emergency

Health and Human Rights  
in Eastern Burma



A Report by  
Back Pack Health Worker Team

# **Chronic Emergency**

Health and Human Rights in Eastern Burma

# TABLE OF CONTENTS

|   |    |
|---|----|
| Foreword by Thai Senator Jon Ungphakorn.....                            | 1  |
| Foreword by Dr. Cynthia Maung.....                                      | 5  |
| Definitions and Abbreviations.....                                      | 6  |
| Executive Summary.....  | 9  |
| Recommendations.....  | 12 |
| Introduction.....   | 15 |
| Basic health indicators.....  | 17 |
| Four cuts policy.....   | 19 |
| The Backpack Health Workers Team.....                                   | 21 |
| Methodology.....  | 24 |
| Survey design.....  | 24 |
| Training.....   | 25 |
| Survey outcomes.....  | 26 |
| Findings.....   | 29 |
| I. Survey locations.....  | 29 |
| II. Demographic characteristics.....                                    | 30 |
| III. Health indicators.....   | 32 |
| Mortality and common causes of death.....                               | 32 |
| Malaria.....  | 34 |
| Morbidity.....  | 37 |
| <i>Prevalence of childhood malnutrition</i> .....                       | 37 |
| <i>Water and Sanitation</i> .....                                       | 38 |
| <i>Reproductive Health</i> .....  | 39 |
| IV. Human rights violations and their Impacts on health indicators..... | 42 |
| <i>Forced Displacement</i> .....  | 44 |
| <i>Landmine injuries/deaths</i> .....                                   | 47 |

|   |    |
|---|----|
| <i>Food destruction and looting</i> ..... | 50 |
| <i>Forced Labor</i> .....                 | 56 |
| <i>Soldierviolence</i> .....              | 58 |

V. Health Care Issues in the context of Human Rights

|                              |                             |
|------------------------------|-----------------------------|
| Violations.....              | 61                          |
| <b>Conclusion</b> .....      | <b>65</b>                   |
| <b>Recommendations</b> ..... | <b>70</b>                   |
| <b>References</b> .....      | <b>72</b>                   |
| <b>Appendix: Survey</b>      | <b>Questionnaires</b> ..... |
|                              | <b>79</b>                   |

# FOREWORD

by Thai Senator Jon Ungphakorn

When I was a child, Burma was considered to be the rice basket of Asia, richly endowed with natural resources. With advanced health and education systems, Burma seemed headed for a bright and prosperous future.

The opposite has instead unfolded within the span of my lifetime; a spiralling transition into a society of extreme repression, poverty and serious health problems. Today, Burma is known more for its brutal military dictators – a succession of whom have held power since 1962 – renowned for their paranoia, xenophobia, and secrecy. Under their rule, Burma has become an international pariah: a UN Least Developed Nation with a health system ranked second worst in the world; a country consistently ranked one of the most corrupt in the world; a global center for the narcotics trade and money laundering; and a major source country for trafficking in persons. Reports of widespread human rights abuses carried out by the military on civilian populations include the common use of forced labor and the systematic rape of women in several conflict areas of the country.

The generals who rule Burma have gone to great pains to close off most of the country. Censorship is draconian and reliable statistics remain elusive, part of an effort to hide the facts behind a facade of normalcy. In particular, there is an absence of information about populations living in the conflict areas or “black zones” of Burma, who have faced decades of civil conflict. This latest glimpse into the heart of darkness in Burma, aptly entitled *Chronic Emergency – Health and Human Rights in Eastern Burma*, is an appalling one.

In this report by the Backpack Health Worker Team (BPHWT), the extent of the public health catastrophe in these areas, after five decades of civil war, disinvestment in social services, and widespread human rights abuses, is revealed for the first time. Infant, child, and maternal mortality rates are much higher than Burma’s official statistics, already amongst the worst in ASEAN. Death and disability

from malaria, landmine injuries, and malnutrition are widespread. Forced relocation doubles the chance of childhood death and increases the risk of a landmine injury by almost five times. Food insecurity not only increases the risk of malnutrition but also increases the chances of landmine injuries and malaria, as people are forced to forage in the jungles.

With abysmal statistics like these, it is no wonder the regime tries so hard to hide them from the world. The Burmese military junta is the source of the problem, not only through its abuses and neglect for the welfare of the people, but also through increasing restrictions on humanitarian aid efforts, particularly to ethnic minorities living in rural Burma. Burma already receives the lowest per capita international aid per person in the region, less than Laos. Yet the government has set increasingly restrictive conditions, leading several international organisations to withdraw from Burma or severely curtail programs, including the Global Fund for HIV/AIDS, Tuberculosis, and Malaria, the International Committee of the Red Cross, and Medecins Sans Frontieres (MSF) - France.

In February 2006, the junta formalized these restrictions by issuing a new set of guidelines for international aid agencies, applying ministry-level controls over approval of programs, project implementation, hiring of staff, procurement of supplies and equipment, and internal travel. Dr. Herv Isambert of MSF- France, one of the few groups that had been working in the conflict zones of Karen and Mon States, said in March that the regime wanted “to get rid of all humanitarian workers in these politically sensitive regions... the restrictions imposed on us reduced us to the role of specialist contractors subjected to the political will of the military junta.” He further added, “The [Burmese] authorities don’t want anyone to witness how they organize the forced displacement of the population, the burning of villages, and forced recruitment.”

It is becoming increasingly clear that many of the burdens arising from tyrannical rule in Burma are no longer borne by the people of Burma alone. In 1997, there were only 210,000 Burmese refugees and asylum-seekers throughout the region. Today, almost a million

have officially fled to neighboring countries, perhaps another million live internally displaced in Burma, and probably over a million exist as undocumented migrants in Thailand alone. Malaria, much of it drug-resistant, is rife on Thailand's borders with Burma. Tuberculosis remains the most common disease diagnosed in Burmese migrants living in Thailand, and some diseases already eradicated or controlled in Thailand such as lymphatic filariasis (elephantiasis) are returning. Narcotics continue to flow from Burma, bringing with them the spread of HIV and a rash of social, economic, and other health woes. Increasingly, hospitals in Thailand, their budgets already strained by the government's under-funded Universal Health Programme, also have to devote increasing resources to provide care for migrant workers.

Directly or not, we are paying for Burma's failures. Noted Kofi Annan in his 2001 Nobel Peace Prize acceptance speech, "Today's real borders are not between nations, but between powerful and powerless, free and fettered, privileged and humiliated. Today, no walls can separate humanitarian or human rights crises in one part of the world from national security crises in the other."

The issues raised in this report are extremely pertinent to the urgent need for long-term sustainable interventions by the international community. Polite diplomacy and unconditional engagement with the SPDC has not worked. In fact, trade and investment have provided them with the means to perpetuate their repressive rule. This year, in some of the areas covered in this survey, the regime has actually intensified attacks on ethnic Karen civilians, displacing perhaps 18,000 more, creating a new humanitarian catastrophe. Thousands have already crossed into Thailand or are camped just on the border.

As the root cause of the problems are cross-border and multi-disciplinary in nature, attempts to address them must not be confined by political boundaries. Groups such as the BPHWT, working in dangerous areas inaccessible to international humanitarian relief, should be fully supported by Burma's neighbors and international agencies in their impressive efforts to develop appropriate health

services in such dangerous conditions. I greatly admire this team of brave, dedicated men and women for their dedication to the welfare of the communities whom they serve. They live and work under the same omnipresent threat of violence as their charges, and since the inception of the Backpack Medic Program, seven medics and one midwife have been killed by landmines or SPDC soldiers.

The efforts of individuals such as these must be recognized and supported, while simultaneously, pressure must be brought to bear on the junta, whose policies are at the root of, and continue to exacerbate these public health problems. This is why activists, legislators and many governments already support a binding UN Security Council resolution to ensure that the Burmese regime fulfills its own promises of economic and political reforms.

As Thais, we are well qualified to petition the international community to work on a common agenda to address the atrocities of the Burmese regime in ways which put the interests of the Burmese peoples and of long-term social stability in the region above narrow commercial interests, as well as to support those groups such as the BPHWT who are working along the border to relieve suffering at the hands of the regime. Indeed, we can ill afford not to.

*Outgoing Thai Senator Jon Ungphakorn is a member of the ASEAN Inter-Parliamentary Myanmar Caucus (AIPMC) and a respected advocate on issues related to health and human rights.*

# FOREWORD

*by Dr. Cynthia Maung,  
Chairperson of Back Pack Health Worker Team*

Due to nearly 50 years of rule by military dictatorship and civil war, hundreds of thousands of the people of Burma have become victims of forced relocation. They must flee into the jungle or to neighboring countries for refuge, or leave the country permanently to resettle in faraway lands. The people of Burma have been denied one of the basic rights of humanity: the right to health. Those who have to suffer most are the ethnic peoples living in the border and rural areas. For those living in border areas, personal security and health status have sunk to the lowest levels.

Since 1998, the Back Pack Health Worker Team (BPHWT) has been working constantly to provide healthcare for the internally displaced persons (IDPs) and assist community-based health programs. The BPHWT has worked with the aim of elevating the standard of health service from curative to preventive care, based on the primary healthcare approach. More recently, BPHWT has systematically researched and established the fact that there is a relationship between quality of health and human rights violations. Having suffered bitter experiences together with the community, the health workers have endeavored to produce this report at a time of great difficulty characterized by very little personal security.

This report is published with two intentions. First, to inform and urge sympathizers to participate in the effort to promote political change in Burma. Second, to invite humanitarian assistance in providing security and rehabilitation to the victims of the civil war.

In closing, I would like to commend and honor all the health workers who are providing healthcare in the field and who have risked life and limb to collect data for this report. I would also like to express my deep appreciation and gratitude to persons from international health institutes, health organizations, human rights organizations, individuals and community leaders who have rendered their assistance and cooperation, on all sides.

## DEFINITIONS AND ABBREVIATIONS

|                    |   |
|--------------------|---|
| <b>ASEAN</b>       | Association of South-East Asian Nations   |
| <b>Black Zones</b> | Areas designated by the Burmese military as free fire zones, where active conflict and Burmese counter-insurgency policy often forces people into becoming IDPs |
| <b>BPHWT</b>       | Backpack Health Worker Team   |
| <b>DKBA</b>        | Democratic Karen Buddhist Army, a Karen armed faction at peace with SPDC  |
| <b>HHR</b>         | Health and Human Rights   |
| <b>HRV</b>         | Human Rights Violation  |
| <b>IDP</b>         | Internally Displaced Person   |
| <b>IMR</b>         | Infant mortality rate: ratio of deaths in children aged less than one year to 1,000 live births   |
| <b>KNPLF</b>       | Karenni Nationalities Peoples' Liberation Front, armed group in Karenni State; has had a ceasefire since mid-1990s  |
| <b>KNPP</b>        | Karenni National Progressive Party, the main armed ethnic group in Karenni State which continues to actively resist the SPDC.                                   |
| <b>KNU</b>         | Karen National Union, the main Karen resistance organization; made an informal ceasefire with SPDC in January 2004 which is presently not holding.              |
| <b>KNLA</b>        | Karen National Liberation Army, the army of the KNU   |
| <b>KPF</b>         | Karen Peace Force, a Karen armed group working with the SPDC in Dooplaya district (survey region 7), also referred to as <i>Nyein Chan Yay</i> [Peace] Group    |
| <b>MMR</b>         | Maternal Mortality Ratio: ratio of deaths among pregnant women and until 6 weeks postpartum to 100,000 live births.   |

|                 |  |
|-----------------|--|
| <b>MTC</b>      | Mae Tao Clinic, established in 1989 by a Burmese physician in exile, Dr. Cynthia Maung, in the Thai town of Mae Sot, near the border with Burma. |
| <b>SPDC</b>     | State Peace & Development Council, Burma's ruling military junta   |
| <b>SSA-S</b>    | Shan State Army-South, the main armed group in Shan State still engaged in active resistance against the SPDC.                                   |
| <b>Tatmadaw</b> | The Burma Army   |
| <b>U5MR</b>     | Under-five mortality rate: ratio of deaths in children aged less than five years to 1,000 live births. Also called Child Mortality Rate.         |

## MAP OF BURMA AND AREAS SURVEYED



## EXECUTIVE SUMMARY

Disinvestment in health, coupled with widespread poverty, corruption, and the dearth of skilled personnel have resulted in the collapse of Burma's health system. Today, Burma's health indicators by official figures are among the worst in the region. However, information collected by the Back Pack Health Workers Team (BPHWT) on the eastern frontiers of the country, facing decades of civil war and widespread human rights abuses, indicate a far greater public health catastrophe in areas where official figures are not collected.

In these eastern areas of Burma, standard public health indicators such as population pyramids, infant mortality rates, child mortality rates, and maternal mortality ratios more closely resemble other countries facing widespread humanitarian disasters, such as Sierra Leone, the Democratic Republic of the Congo, Niger, Angola, and Cambodia shortly after the ouster of the Khmer Rouge. The most common cause of death continues to be malaria, with over 12% of the population *at any given time* infected with *Plasmodium falciparum*, the most dangerous form of malaria. One out of every twelve women in this area may lose her life around the time of childbirth, deaths that are largely preventable. Malnutrition is unacceptably common, with over 15% of children at any time with evidence of at least mild malnutrition, rates far higher than their counterparts who have fled to refugee camps in Thailand. Knowledge of sanitation and safe drinking water use remains low.

Human rights violations are very common in this population. Within the year prior, almost a third of households had suffered from forced labor, almost 10% forced displacement, and a quarter had had their food confiscated or destroyed. Approximately one out of every fifty households had suffered violence at the hands of soldiers, and one out of 140 households had a member injured by a landmine within the prior year alone. There also appear to be some regional variations in the patterns of human rights abuses. Internally displaced persons (IDPs) living in areas most solidly controlled by the SPDC

and its allies, such as Karenni State and Pa'an District, faced more forced labor while those living in more contested areas, such as Nyaunglebin and Toungoo Districts, faced more forced relocation. Most other areas fall in between these two extremes. However, such patterns should be interpreted with caution, given that the BPHW survey was not designed to or powered to reliably detect these differences.

Using epidemiologic tools, several human rights abuses were found to be closely tied to adverse health outcomes. Families forced to flee within the preceding twelve months were 2.4 times more likely to have a child (under age 5) die than those who had not been forcibly displaced. Households forced to flee also were 3.1 times as likely to have malnourished children compared to those in more stable situations.

Food destruction and theft were also very closely tied to several adverse health consequences. Families which had suffered this abuse in the preceding twelve months were almost 50% more likely to suffer a death in the household. These households also were 4.6 times as likely to have a member suffer from a landmine injury, and 1.7 times as likely to have an adult member suffer from malaria, both likely tied to the need to forage in the jungle. Children of these households were 4.4 times as likely to suffer from malnutrition compared to households whose food supply had not been compromised.

For the most common abuse, forced labor, families that had suffered from this within the past year were 60% more likely to have a member suffer from diarrhea (within the two weeks prior to the survey), and more than twice as likely to have a member suffer from night blindness (a measure of vitamin A deficiency and thus malnutrition) compared to families free from this abuse.

Not only are many abuses linked statistically from field observations to adverse health consequences, they are yet another obstacle to accessing health care services already out of reach for the majority of IDP populations in the eastern conflict zones of Burma.

This is especially clear with women’s reproductive health: forced displacement within the past year was associated with a 6.1 fold lower use of contraception. Given the high fertility rate of this population and the high prevalence of conditions such as malaria and malnutrition, the lack of access often is fatal, as reflected by the high maternal mortality ratio—as many as one in 12 women will die from pregnancy-related complications.

**Selected Human Rights Violations and Adverse Health Consequences**

| <b>Human Rights Violation in Preceding 12 months</b> | <b>Linked Health Consequence</b>                             | <b>Odds Ratio*</b> |
|--|--|--------------------|
| <b>Forced Relocation</b>                             | ◆ Childhood (under 5) death                                  | 2.4                |
|  | ◆ Childhood malnutrition                                     | 3.1                |
|  | ◆ Decreased use of contraception                             | 6.1                |
|  | ◆ Landmine injury  | 4.5                |
| <b>Food Insecurity</b>                               | ◆ Overall death  | 1.5                |
|  | ◆ Moderate child malnutrition in household                   | 4.4                |
|  | ◆ Severe child malnutrition in household                     | 2.0                |
|  | ◆ Landmine injury  | 4.6                |
|  | ◆ Head of household suffering from malaria at time of survey | 1.7                |
| <b>Forced Labor</b>                                  | ◆ Diarrhea in two weeks prior to survey                      | 1.6                |
|  | ◆ Night blindness (vitamin-A deficiency)                     | 2.1                |

\*Ratios compare the odds of the linked health consequence compared to households that have not suffered this human rights violation. Ratios greater than 1 signify that the consequence is greater.

This report is the first to measure basic public health indicators and quantify the extent of human rights abuses at the population level amongst IDP communities living in the eastern conflict zones of Burma. These results indicate that the poor health status of these IDP communities is intricately and inexorably linked to the human rights context in which health outcomes are observed. Without addressing factors which drive ill health and excess morbidity and mortality in these populations, such as widespread human rights abuses and inability to access healthcare services, a long-term, sustainable improvement in the public health of these areas cannot occur.

# RECOMMENDATIONS

## **To Burma's neighboring countries**

- (1) To encourage support for community-managed border-based health programs that are providing health care to displaced persons in Burma and collect vital health information about this neglected population.
- (2) To continue and increase cooperation between their respective public health ministries and community-managed border-based health program implementers in order to coordinate effective disease control programs.

## **To the United Nations, Association of South East Asian Nations & the International Community**

- (3) To continue and increase pressure on the SPDC in order to halt their human rights abuses such as forced labor and forced displacement which are driving the health crisis in eastern Burma.

## **To United Nations Agencies & International Non-Governmental Organizations providing aid to Burma**

- (4) To provide humanitarian assistance to the people of Burma by building up human resources for community-managed organizations which can provide long term development for the actual needs of the people.
- (5) To recognize that without addressing factors which drive ill health such as widespread human rights abuses and inability to access healthcare services, a long-term, sustainable improvement in the public health of these areas cannot occur and therefore to include in their programs transparent efforts to address these human rights issues with the SPDC.

- (6) To provide support for community-managed border-based health programs that are providing health care to displaced persons in Burma and collect vital health information about this neglected population.
- (7) To work together with community-managed border-based health program implementers to coordinate effective disease control programs.
- (8) To support efforts to protect the life and safety of health workers in the border regions of Burma.

### **To Burma's Opposition Movement**

- (9) To further promote human rights protection programs for people in Burma
- (10) To draw up plans for a nationwide health policy and health system according to international human rights standards for national health requirements.
- (11) To continue and improve efforts to monitor and expose the health crisis in Burma's border regions and their underlying causes.
- (12) To continue and increase support for community-managed border-based health programs.

### **To all Peoples of Burma**

- (13) To increase awareness of the root causes of the health crisis in Burma and become more actively involved in setting up community-based primary health care programs.

# INTRODUCTION

Burma is one of the most ethnically diverse countries in the world. Although the largest ethnic group are the Burmans, a large part of the population is comprised of ethnic minorities, speaking over 100 different languages and dialects, and occupying approximately half of the land area of the country, especially along the country's mountainous frontiers. The major groups include the Chin, Kachin, Karenni (Kayah), Karen (Kayin), Mon, Rakhine (Arakan), Shan and others. Although significant populations of different ethnic minorities exist in each state, ethnic minorities are predominant in the border areas, and these states are generally named after the largest ethnic group.

The country has been ruled by military dictators since a Burmese general, Ne Win, toppled a popularly elected government in 1962, his justification being to "prevent the nation from breaking up" during a period of time when ethnic minority leaders, particularly the Shan, were pressing for increased autonomy. The constitution was suspended and many ethnic minority leaders were imprisoned, with several dying or disappearing while in custody. A succession of Burmese military regimes, dominated by ethnic Burmans, have ruled the country ever since.

The current junta, the State Peace and Development Council (SPDC), led by Senior General Than Shwe, effectively runs the country by decree, ruling with an iron fist. This regime has consistently been ranked as one of the most oppressive dictatorships in the world, in which widespread human rights abuses are perpetrated by the government against its critics, particularly ethnic minorities. (US State Department 2006; Wallechinsky 2006) Harassment, detention, and intimidation of political dissidents continues to be widespread. Today, the junta holds almost 1,100 political prisoners, including Aung San Suu Kyi, leader of the National League for Democracy (NLD) and winner of the 1991 Nobel Peace Prize, the only Nobel Peace Laureate still in detention. (US Department of State 2006)

Military mismanagement has also led this country, rich in natural resources, into becoming one of the poorest in the world, forced to request United Nations Least Developed Country status for debt relief in 1987. In sharp contrast, despite being at similar stages of development at Burma's independence in 1948, Thailand pursued democratic reforms and today, it has become a regional hub of trade and travel, its GDP several times that of its impoverished neighbor.

### Basic health indicators

One of the most evident casualties of misrule and disinvestment is the collapse of Burma's once-vaunted health and education systems. While Burma's military continues to consume the lion's share of the national expenditures, approximately 40%, health and education receive <3% and 10% respectively. (OSI 2001) This collapse is reflected in health indicators such as infant and child mortality rates (Table 1), the probability of dying between birth and one and five years of age respectively. Both measures are standard indicators that gauge quality and access to medical care, especially for maternal and child health programs.

Table 1 **Infant and child mortality rates, life expectancy at birth, and GNI per capita: comparison between Burma and Thailand (2004)**

|  | Burma | Thailand |
|--|-------|----------|
| <b>Infant Mortality Rate</b><br>(under 1), per 1,000 live births | 76    | 18       |
| <b>Under-5 (Child) Mortality Rate</b><br>per 1,000 live births   | 106   | 21       |
| <b>Life expectancy at birth</b> (years)                          | 61    | 70       |
| <b>GNI per capita</b> (US\$)                                     | 220   | 2,540    |

Source: UNICEF 2006

The burden of mortality could be reduced substantially given effective and efficient health systems, as many childhood deaths are attributed to easily preventable diseases. Basic and cost-effective

interventions, such as childhood vaccinations, insecticide-treated nets, or vitamin A supplementation, are neglected by the junta; 90% of vaccines in the country are provided for by the United Nations Children's Fund. (Pinheiro 2006) In a rare admission from the secretive junta, the Burmese Ministry of Health acknowledged, "The principal endemic diseases in Myanmar are cholera, plague, dengue haemorrhagic fever, watery diarrhea, dysentery, viral hepatitis, typhoid, and meningococcal meningitis. Cholera, plague, and dengue haemorrhagic fever reach epidemic proportions in certain years, often occurring in cycles." (WHO, Regional Office for South-east Asia 2004)

In 2000, the World Health Organization ranked Burma's healthcare system below all but one of its member states, only outperforming Sierra Leone. (World Health Organization 2000) Hospitals, where they exist, are left operating at very rudimentary levels and, with low government staff wages and widespread corruption, families often must bribe hospital employees to obtain even substandard treatment, in addition to paying for the actual costs of medical expenses. (Belak 2002) Families are often forced to obtain needed drugs on the burgeoning medical black market, given the shortage of supplies in government-run hospitals. The only hospitals sheltered from this decay have been those serving the military. (Belak 2002) Since almost a quarter of all households have incomes below minimal subsistence level and that 70% of household expenditures are spent on food, many have to go without basic education or health services. (United Nations Development Programme and United Nations Population Fund 2001)

While these indicators highlight the appalling shortfalls of the junta's efforts to provide basic health services at the national level, the situation along the country's frontiers, overwhelmingly populated by ethnic minorities, is especially dire. Many of these groups have been fighting for greater autonomy for decades in some of the longest civil wars in history. Shortly after Ne Win's coup, the Burma Army or *Tatmadaw* embarked upon a strategy to defeat the ethnic rebellions and expand central power using a combination of negotiations and brokering of deals between local groups and a brutal military counter-

insurgency strategy. Since 1989, a total of 17 armed ethnic groups have agreed to ceasefires with Rangoon.

### **The four-cuts policy**

Several groups, however, continue active resistance, particularly along the eastern frontier bordering Thailand. These include the Shan State Army- South (SSA- S), the Karenni National Progressive Party (KNPP), and the Karen National Liberation Army (KNLA), the armed wing of the Karen National Union (KNU). It is in the areas where these groups are active that the *Tatmadaw* employs a counter-insurgency strategy known as the Four Cuts Policy, aimed at cutting the four crucial links between them and local villages (food, funds, recruits, and information) and increasing Burmese army control over the local population. Central to this policy is the forced relocation of civilians from contested areas to “relocation centers” more firmly under the control of the central administration, and the destruction of rice fields and food storage facilities. (Altsean 2005; TBBC 2004) Relocation is often accompanied by widespread summary executions, confiscation of land and property, torture, and compulsory contributions to the Burma Army (including arbitrary taxes). (Risser et al. 2004; U.S. Department of State 2006)

Rape of ethnic minority women by *Tatmadaw* soldiers is also widespread in these areas, and has been extensively documented. Rape is used by the junta as a weapon of war to intimidate those who oppose the regime, allegations that the regime denies despite being widely reported by multiple ethnic minority and women’s organizations. (SWAN & SHRF 2002; Apple & Martin 2003; KWO 2004; WLB 2004; WCRP & HURFOM 2005) Multiple reports have detailed that rape is committed with impunity by Burmese army soldiers and the victims are warned not to discuss it; those who do complain are often detained, tortured, or murdered by the Burmese government. (SHRF & SWAN 2002; Apple & Martin 2003; KWO 2004; WLB 2004; WCRP & HURFOM 2005)



Victims of the Burma Army's 'Four Cuts' policy are forced to flee from their villages into the jungle where they are at much greater risk of adverse health outcomes.

The degree of forced relocation is difficult to estimate, although the policy was even more brutally and systematically applied after 1996. A 2004 report by the Burma Border Consortium found that, since 1996, over 2,500 villages were destroyed or forcibly relocated, displacing over 600,000 in the five administrative areas that form the eastern border with Thailand: Tenasserim Division, and the Shan, Karenni, Karen, and Mon States. (Risser et al. 2004; TBBC 2004)

Over 350,000 were coerced into government controlled “relocation centers,” while the remainder hid in the jungles or in temporary settlements as internally displaced persons (IDPs), hoping to return to their land but living with the threat of *Tatmadaw* patrols.

These patrolling troops often killed, tortured, and raped civilians found outside permitted zones to deter others from returning to their original villages. (SHRF 1998; Risser et al. 2004; TBBC 2004) As a result, many IDPs are forced to hide in the jungles, usually in small, fragmented communities lacking basic services such as medical and educational facilities. (Risser et al. 2004; US State Department 2006) Medications are frequently unavailable, often as a result of SPDC blockades to prevent aid to rebels and villagers living in contested areas; individuals found in possession of medicines in these areas may be liable to arrest and abuse. (KHRG 2001)

When families are able to afford to seek health care, the journey to a township center clinic or hospital for medical care can be long and dangerous, with risks such as Burma Army soldiers, landmines, bandits, and disease, including malaria, precluding medical care. (Risser et al. 2004; TBBC 2004) The SPDC has prohibited access by international relief organizations working in Burma to these populations, shielding from scrutiny the health-related effects of this conflict. (Lee et al. 2006) As such, even though the national health statistics reflect a national health crisis, they still significantly obscure the true public health situation given that these figures do not access the populations living in these limited access, security-sensitive areas, designated by the junta as “black zones”. (UNICEF 2004; Chelala 1998)

## **The Backpack Health Worker Team (BPHWT)**

Over 50 years of civil war in Burma has displaced many thousands of people due to forced relocation, forced labor, and from other human rights abuses from Burma's Army. Consequently, many of these people were denied their basic human rights including the right to health. Specifically those people living along the border have been severely affected. Therefore, in an effort to regain their health rights, the Back Pack Health Worker Team (BPHWT) was established by the health workers in Mon, Karen, Karenni and border areas in 1998

The formation of the BPHWT was led by Dr. Cynthia Maung, who has served as chairperson since its inception. Dr. Cynthia, an ethnic Karen physician who fled Burma as a result of her involvement with pro-democracy activities, initially established the Mae Tao Clinic (MTC) in 1989 to provide for the health of similarly displaced individuals along the Thai-Burma border. The MTC is located in Thailand on the outskirts of Mae Sot, in Tak Province. The clinic has steadily grown, recording over 100,000 patient visits in 2004, and has become an important center for basic medical and public health education, training hundreds of healthcare workers. For her work, Dr. Maung has received numerous honors, including the John Humphrey Freedom Award (Canada 1999), the Jonathan Mann Health and Human Rights Award (USA 1999), the Foundation for Human Rights in Asia's Special Award (Japan 2001), the Van Heuven Doedhart Award (Netherlands 2001), and the Magsaysay Award for Community Leadership (2002). In 2005, Dr. Maung was a nominee for the Nobel Peace Prize.

The aim of the BPHWT is to equip people with the skill and knowledge necessary to manage and address their own health problems while working towards sustainable development through the promotion of primary health care. A multi-ethnic organization of mobile medical teams, BPHWT serves a population of approximately 140,000 IDPs and war-affected residents living in "black zones" of Karen, Karenni, and Mon States, along the eastern frontiers of the country. Initially made up of 32 teams with 120 health workers, it

had expanded by 2005 to 70 teams of 3-5 healthcare workers (“backpack medics”) plus essential staff, travelling on foot and carrying medical supplies and educational materials, and providing primary health care. All activities are implemented with the cooperation of community leaders, in areas where health care is otherwise unavailable. Teams also deliver educational messages on a variety of public health topics including water and sanitation, family planning, malaria prevention, landmine awareness, and others.

Despite the best efforts at safety, the work done by the BPHWT is dangerous. Since the inception of the program, seven backpack medics and one traditional birth attendant have been killed as a result of landmines or by SPDC soldiers, in gross violation of the principles of protection offered to medical personnel under the first Geneva Convention. The gathering of data is particularly risky and even carrying pen and paper can arouse the suspicion of SPDC soldiers.

A principal goal of the BPHWT is to equip communities with the skills and knowledge necessary to manage, address and prioritize their own health problems, while working toward long-term sustainable development. Thus, the collection of data relevant to the health of the population served by BPHWT has increasingly become an important part of its work and so began conducting health surveys in 2000. In 2004, BPHWT began to examine the links between health issues and the human rights contexts in which they occur in this target population. Initially, a two-part Health and Human Rights (HHR) survey was conducted. Villagers in eight regions of Karenni State, Karen State, Mon State, and Tenasserim Division were asked about specific experiences relating to potential violations of human rights and the health status of household family members. The targeted areas included those that have been under operative ceasefires for ten years or more, regions of active armed conflict, and areas of sporadic armed conflict.

This report presents the results of this 2004 HHR survey. In addition the results of semi-structured interviews with BPHWT workers from all eight regions provided qualitative data to add depth to the

analysis. This report also draws upon four topical health surveys conducted by BPHWT over the previous four years, including the Nutritional Status Survey (2000), Malaria Survey (2001), Water, Sanitation and Mortality Survey (2001), and Reproductive Health Survey (2002). Together, these results indicate that the poor health status of IDP communities in the eastern conflict zones of Burma is intricately and inexorably linked to the human rights context in which health outcomes are observed. The long-term amelioration of public health crises in these areas must also involve addressing these underlying realities that fuel the humanitarian crisis which, in turn, helps drive adverse health outcomes.

# METHODOLOGY

## Survey Design

Since 2000, BPHWT has conducted a series of population-wide rapid assessment surveys for various morbidity and mortality indicators, as well as for needs assessments for a variety of health programs. Periodic rapid assessment surveys are appropriate for collecting information at the population level for these mobile health workers. Given the instability of the target population, implementation requires some basic modification of standard methods. Village-based cluster sampling was deemed the best way to effectively represent the BPHWT population while maintaining a survey design that was logistically feasible, given the widely dispersed villages, travel on foot over mountainous terrain, and security concerns that force circuitous and irregular travel.

When conducting these surveys, BPHWT has followed standard methods for conducting cluster-sample surveys (Bennett 1991), with slight modifications. These modifications include slightly smaller cluster sizes and increased numbers of clusters. Specifically, a population-based two-stage cluster sampling approach has been followed and the chosen sampling frame for all surveys since 2001 has consisted of the entire population served by BPHWT. The initial stage sampling was conducted using area-wide village population lists, allowing for a proportionate-to-population size sampling strategy. Within each of 100 selected clusters, BPHWT team members sampled 20 households per community. These households were selected by randomly choosing a direction from the approximate center of the village and then visiting every  $n$ th household, where  $n$  equals the number of village households divided by twenty.

Security issues and the unique operational method of the mobile backpack team resulted in important constraints to implementation. For example, interviewers could often spend only a few days in each village, limiting the length of the survey. Thus, the current household

surveys conducted by BPHWT are limited to two-sides of one page, which also increased data quality and response rate. In addition, if the head of household was unavailable, the next nearest household was selected, as spending time to return for follow up visits would have created security concerns. Surveys by necessity were conducted when health workers reached pre-selected clusters (villages) in the course of their usual work over approximately a three-month time period.

The inclusion of potentially dangerous areas was necessary to reduce bias from limiting data collection to more secure areas. In addition, excluding such areas in advance would have been difficult due to the fluidity of the security situation. If an entire village had been displaced and moved essentially intact (which is not uncommon, as villagers often attempt to stay together), the medic attempted to locate the villagers and conduct the interval sampling process. If displaced villagers could not be accessed because of security reasons, then the nearest accessible village was selected. BPHWT leaders stressed, however, that health workers should never take greater risks simply for the collection of data.

## **Training**

Before the implementation of each survey, the BPHWT administration team led the subset of BPHWT medics who were responsible for the survey in an intensive 4-5 days training workshop. These workshops included training modules regarding interview techniques, sampling methods, survey questions, and relevant case-definitions. Field manuals and other training documents were also created as guides for the health workers when actually carrying out the survey in the field. In collaboration with partners providing technical assistance to the BPHWT, the administrative team received advanced training in survey methods, basic epidemiology, data management and entry, and analysis and interpretation. After returning from the field, survey workers delivered the completed survey forms to the administrative team and interacted closely to quickly resolve any concerns regarding confusing or incomplete information.

The survey forms were then catalogued, reviewed, entered, and brief analyses were completed to root out questions for field staff, and to present preliminary results. More complete results were presented and discussed when the field staff returned for their following workshop.

## Survey outcomes

Topical surveys conducted since 2000 have included nutrition (2000), water and sanitation (2001), malaria (2001), and reproductive health (2002). In addition, mortality surveys have been done in conjunction on an annual basis since 2001. All surveys except the 2000 nutrition survey were conducted following the above described methodological approach. The sample for the nutrition survey was selected via a convenience sample; a sub-sample of those community members presenting to the BPHWT medics participated. These previous surveys included basic morbidity indicators and knowledge, attitudes and practices questions related to a specific health topic: nutrition (breastfeeding practices, dietary intake, nutritional status of infants), malaria (malaria morbidity, access to insecticide-treated nets), water and sanitation (hand-washing, latrine-use, boiling of water), and reproductive health (contraceptive prevalence, antenatal and prenatal care practices, pregnancy history). In addition, retrospective reporting of vital events within households has also been collected in short mortality surveys (2001-2004). These mortality surveys include a household census and questions regarding all births and deaths occurring within the previous twelve months. Age and sex were recorded for each living person in the household. For each reported death, respondents chose from a list of causes of death, which included malaria, diarrhea, pregnancy-related, acute lower respiratory infections (ALRI) landmine, violence, and "other" causes.

While these previous surveys provide some additional contextual and comparative data, this report focuses on the results of the 2004 HHR survey. There were five basic components in this survey. **(1) Vital Status:** The first of these was the standard household listing of all members by age and sex, as has been collected in previous

BPHWT surveys. **(2) Morbidity:** A section on morbidity included a rapid diagnostic test of parasitemia in the respondent (mother or head of household) and questions regarding malaria and diarrhea episodes in the two weeks prior to the survey. For all children less than 5 years old, field workers collected mid-upper arm circumference (MUAC), a rapid field instrument to measure malnutrition that has been demonstrated to be predictive of mortality in several analyses. (Powell-Tuck 2003, Berkley 2005), **(3) Public Health Needs:** A third module aimed to measure access to basic public health needs such as clean water, latrines, contraceptives, and iron supplements during pregnancy. **(4) Mortality:** Respondents were asked to list any household members that died during the 12 months prior to the survey and, when possible, provide a proximal cause of death. **(5) Human Rights Violations:** The last section of the survey focused on the experience of the household in relation to five specific potential human rights violations during the previous 12 months. These included forced labor of household members, attacks by soldiers, theft or destruction of livestock by military forces, landmine injuries, denial of access to care, and forced relocation or movement due to threat of violence or lack of security.

In addition to the survey, results of semi-structured interviews with BPHWT workers from all eight regions provided qualitative data to add depth to the analysis. Surveys were conducted over a period of three months in the various field sites and returned in early 2005 to the BPHWT headquarters. Data was entered into a relational database using Microsoft Access. Quality control was ensured with extensive entry-level consistency and validation checks. All analyses were conducted with technical assistance from Global Health Access Program using a standard statistical package (STATA).

## MAP OF SURVEY LOCATIONS



# FINDINGS

## I. SURVEY LOCATIONS

The entire target population of the BPHWT program constituted the sampling frame for this survey (approximately 140,000 people). The survey was conducted among 2,000 households in eight regions along the eastern conflict zones of Burma, of which 1,834 (91.7%) responded. At the time of this survey, these households included 9,853 persons, giving an average household size of 5.4 persons. Table 2 shows the eight sampled regions along with the total number of responding households within each area.

Table 2 **Total number of households sampled and respondent coverage, by region**

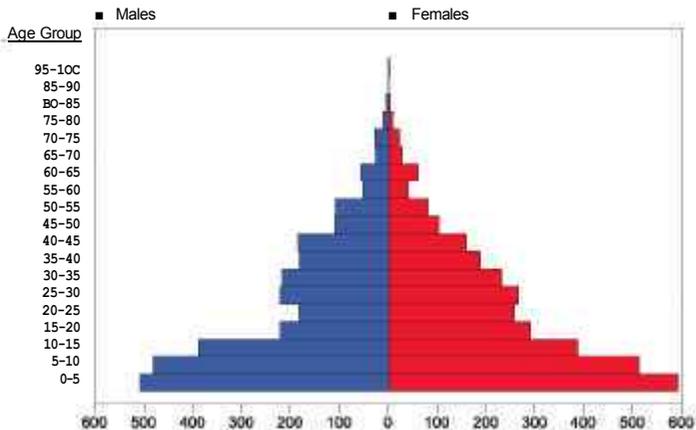
| Region       | Location   | Total households sampled | Respondent households (%) |
|--------------|--|--------------------------|---------------------------|
| 1            | Karenni State                                      | 220                      | 128 (58.2)                |
| 2            | Toungoo District, northern Karen State             | 140                      | 141 (100.7)               |
| 3            | Nyaunglebin District, northwestern Karen State     | 120                      | 119 (99.2)                |
| 4            | Thaton District, western Karen State and Mon State | 240                      | 240 (100.0)               |
| 5            | Papun District, northeastern Karen State           | 220                      | 222 (100.9)               |
| 6            | Pa'an District, eastern Karen State                | 360                      | 359 (99.7)                |
| 7            | Dooplaya District, southern Karen State            | 520                      | 504 (96.9)                |
| 8            | Tenasserim Division, southern Burma                | 180                      | 121 (67.2)                |
| <b>Total</b> |  | <b>2,000</b>             | <b>1,834 (91.7)</b>       |

## II. DEMOGRAPHIC CHARACTERISTICS

The demographic distribution of the IDP population in the regions sampled is depicted in the population pyramid below. This is a standard depiction of the age distribution of a population along two bar graphs, one for males and the other for females, placed back to back. The male to female ratio was 0.90, underscoring the severity of the long-standing conflict in eastern Burma. Notably absent are many 15-25 year old men; in this age range the ratio was 0.88. Ratios less than one are commonly seen in prolonged conflict and post-conflict settings, where men are lost to fighting or to conscription. Comparable ratios have been seen in Afghan refugees in Pakistan (0.88), former rebels in Angola (0.80), and Cambodia following the ouster of the Khmer Rouge (0.86). (Yusaf 1990; Grein 2003; US Census Bureau 2006) [See Figures 1 and 2] These figures further validate previous population-wide, rapid assessment surveys performed by BPHWT in these areas, which found similar ratios. (0.89 in 2002, 0.92 in 2003).

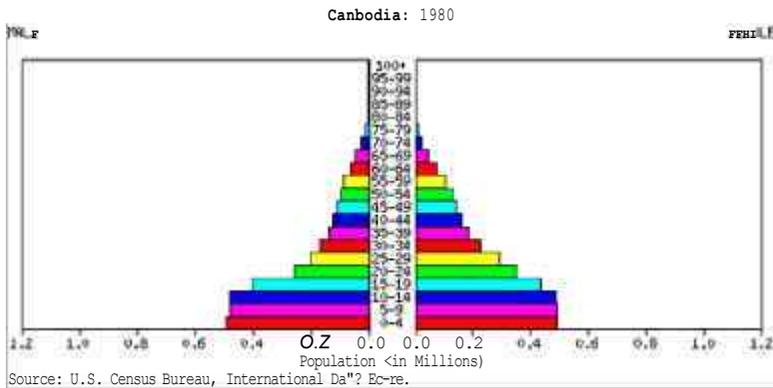
Also notable is that this population pyramid is a triangular distribution: there are many children but the bands rapidly narrow with increasing age. In this population, 44.5% are under 15 years

Figure 1 **Population pyramid for IDP population in Eastern Burma**



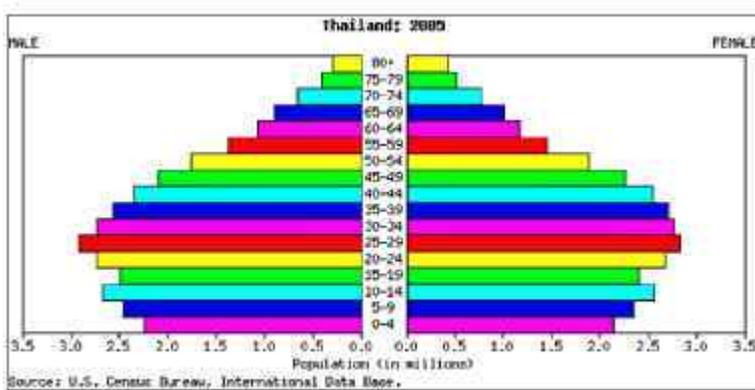
old (compared to 33% in nationwide in Burma), while only 1.38% is over 65. This type of distribution is seen in settings where there are high birth rates, high death rates (particularly in infants and children), and a short life expectancy. Similar patterns are seen in other least developed nations in the world such as Niger, Haiti, and Sierra Leone.

**Figure 2 Population pyramid for Cambodia shortly after the ouster of the Khmer Rouge** Note the triangular shape and absence of young men relative to women



**Figure 3 Population pyramid for Thailand, 2005**

Note the shrinking base of the pyramid, reflecting a decreasing birth rate and increased childhood survival. Note also the almost equal sex ratio.



### III. BASIC HEALTH INDICATORS IN AREAS SERVED BY BPHWT

#### Mortality and common causes of death

The data collected in this survey show high mortality rates, confirming those measured in previous BPHWT mortality surveys between 2002 and 2003. Among 1,834 households, 37 infant deaths and 408 live births were reported, resulting in an overall infant mortality rate of 91/1,000 live births. There were a total of 90 child deaths (Under 5 Mortality Rate: 221/1,000). These estimates are shown in Table 3 along with infant and child mortality rates from the previous two years.

Table 3 Infant and child mortality rates among BPHWT target population in eastern Burma, 2002-2004

|      | Infant Mortality<br>(per 1,000 live births) | Under 5 Mortality<br>(per 1,000 live births) |
|------|---|--|
| 2002 | 135   | 291  |
| 2003 | 129   | 266  |
| 2004 | 91  | 221  |

These figures differ drastically from national figures for Burma, where infant mortality is reported as 76 per 1,000 live births and child mortality (under 5) as 106 per 1,000 live births in 2004. (UNICEF 2006) The child (Under-5) mortality rate in the IDP populations of eastern Burma in 2004, at 221 per 1,000 live births, exceeds that of Cambodia (U5MR = 140 / 1,000), which ranks highest among national statistics for ASEAN countries. The rates in these IDP communities are more comparable to nations at the bottom of the WHO development index, including Sierra Leone, Angola, and Niger (Table 4) (UNICEF 2004) There may be a trend towards decreasing IMR and U5MR; these most recent estimates, however, remain unacceptably high, continuing to resemble more equivalent figures obtained from other countries facing large-scale humanitarian disasters.

Table 4 Comparison of Basic Health Indicators, 2004

|                                       | IMR* | u5MR* |
|---------------------------------------|------|-------|
| <b>“Black Zones” of eastern Burma</b> | 91   | 221   |
| <b>Burma</b>                          | 76   | 106   |
| <b>Thailand</b>                       | 18   | 21    |
| <b>Niger</b>                          | 152  | 259   |
| <b>Sierra Leone</b>                   | 165  | 283   |
| <b>Angola</b>                         | 154  | 260   |
| <b>Congo, DR</b>                      | 129  | 205   |

\* per 1,000 live births Source: UNICEF 2006

In those households where a death (child or adult) was reported, family members were asked to provide a cause of death. These causes are summarized in Table 5.

Table 5 Proportionate mortality: cause of death as reported by family members

| Children     | Total Surveyed under 5 |             | Cause of Death Population |             |
|--------------|------------------------|-------------|---------------------------|-------------|
|              | Deaths                 | % of total  | Deaths                    | % of total  |
| Diarrhea     | 16                     | 22%         | 36                        | 22%         |
| Malaria      | 34                     | 47%         | 67                        | 42%         |
| ARI          | 8                      | 11%         | 20                        | 12%         |
| Landmine     | 0                      | 0%          | 1                         | 1%          |
| Gunshot      | 0                      | 0%          | 2                         | 1%          |
| Pregnancy    | 0                      | 0%          | 1                         | 1%          |
| Other        | 15                     | 20%         | 34                        | 21%         |
| <b>TOTAL</b> | <b>73</b>              | <b>100%</b> | <b>161</b>                | <b>100%</b> |

As seen in Table 5, infectious diseases are overwhelmingly the main cause of death for the populations served by BPHWT, both in children and adults. The single largest identifiable cause of death

is malaria and, among both children and adults, it accounted for almost half of all deaths, followed by diarrhea and acute respiratory infections (ARI).

## Malaria

Identification of malaria as the most important cause of death was supported by parasitemia assessment of survey respondents. Among 1,723 adult mothers tested for malaria using Paracheck, a rapid field diagnostic kit, 216 (12.4%) were positive for parasites (Table 6).

Table 6 **Cross-sectional prevalence of positivity for malaria, as measured by Paracheck, by region**

| Region   | Total tested | Tested positive | Proportion positive |
|--|--------------|-----------------|---------------------|
| Karenni State                                      | 128          | 0               | 0%                  |
| Toungoo District, northern Karen State             | 134          | 14              | 10.4%               |
| Nyaunglebin District, northwestern Karen State     | 119          | 27              | 22.7%               |
| Thaton District, western Karen State and Mon State | 238          | 19              | 8.0%                |
| Papun District, northeastern Karen State           | 219          | 42              | 19.2%               |
| Pa'an District, eastern Karen State                | 298          | 47              | 15.8%               |
| Doooplaya District, southern Karen State           | 491          | 65              | 13.2%               |
| Tenasserim Division, southern Burma                | 112          | 2               | 1.8%                |
| <b>Total</b>                                       | <b>1,739</b> | <b>216</b>      | <b>12.4%</b>        |

In addition, 14% of people in respondent households reported having suffered malaria in the previous two weeks, while 9.8% had suffered from diarrhea. Among children less than five years old, 19.4% had suffered malaria and 15.8% had suffered diarrhea in the preceding two weeks.



Medic treating IDPs for malaria



Medic using Paracheck to diagnose malaria. Of those households surveyed, almost one-fifth of children under five years old had suffered from malaria in the previous two weeks.



Children suffering from malnutrition. Many children are able to eat only once a day, and such diets deficient in vitamins, minerals, and protein greatly increase their vulnerability to disease.

In the mortality survey, the number of violent deaths caused by landmines (n=1) or shooting (n=2) was low, and contrasts with previous surveys (2002-2003) where the proportion of deaths attributable to violence was higher. The overall numbers for comparison across surveys however is low, and retrospective respondent reports of cause of death are often difficult to interpret. Furthermore, one fifth of the deaths in the population were listed as “other” causes. In general, at a population-level most of the excess mortality is not a direct result of conflict, but is likely to result indirectly from widespread rights violations, malnutrition, lack of access to health care services and other essential services. For example, theft of foodstuffs may result in increased risk for malnutrition and/or anemia, which increases the risk of death from malaria. Similarly, forced relocation and the threat of SPDC soldiers may have pushed many to hide in the jungles, without mosquito nets or access to appropriate and timely care, increasing the risk of acquiring malaria and dying as a result.

## **Morbidity**

### *Prevalence of childhood malnutrition*

Overall, over 15 percent of children have MUAC scores consistent with international standards of malnutrition. Of these, about five percent had evidence of severe (<11 cm) or moderate (11 – 12.5 cm) malnutrition (Table 7). Similar figures have been obtained using the same measurement in children living in areas such as the Uganda-Congo border. (Tumwine 2002) The prevalence of malnutrition in IDPs of eastern Burma is higher than their counterparts who have fled to the refugee camps in Thailand, where the prevalence of moderate or severe malnutrition is under 1%. (Kemmer, undated)

The burden of malnutrition is not equally borne in all the survey areas. Five of the six areas surveyed for malnutrition had over a 10% prevalence of moderate or severe malnutrition, generally considered the benchmark for the need for community level intervention, such as universal or targeted feeding support programs.

**Table 7 Estimates of malnutrition as measured by mid-upper arm circumference (MUAC)**

|                       | <b>MUAC measurement</b> | <b>Number of children</b> | <b>Percentage</b> |
|-----------------------|-------------------------|---------------------------|-------------------|
| Severe malnutrition   | Less than 11 cm         | 33                        | 2.3%              |
| Moderate malnutrition | 11 cm to 12.49 cm       | 41                        | 2.8%              |
| Mild malnutrition     | 12.5 cm to 13.49 cm     | 153                       | 10.6%             |
| Normal                | 13.5 cm and above       | 1,212                     | 84.2%             |
| <b>Total</b>          |                         | <b>1,439</b>              | <b>99.9%</b>      |

Of particular concern is Papun District, with over a quarter of the surveyed children having MUAC scores consistent with moderate or severe malnutrition.

A previous nutritional survey conducted by BPHWT in these areas in 2000 found 14% of children to have evidence of severe or moderate malnutrition. (BPHWT 2001a) This sample however was collected from mothers of presumably sick infants presenting to the backpack medics, and thus does not allow for a population estimate. Thus, while there may have been some decrease over the previous five years, direct comparison of these surveys is not possible. The 2001 survey also examined children’s diets and found them to be “sub-standard, both in terms of types of food eaten and frequency.” (BPHWT 2001a). Diets were very low in vegetables, fruits, meat and dairy products, consisting mainly of rice. In addition, many children were only eating one meal per day. The results were vitamin, protein, and iron deficiencies, malnutrition, and greater vulnerability to disease. (BPHWT 2001a) Although less extensive information on dietary intake was included in the most recent survey, many of these factors related to malnutrition risk are likely unchanged.

### *Water and Sanitation*

Workers asked respondents how often they drink boiled water and how often they use a latrine. Overall, the results indicate that a large proportion of the population (>30%) rarely or never boil or purify

their drinking water in any way, and that access to and use of latrines is low. More than 60% of respondents reported that household members either rarely or never use latrines; the remaining households sometimes (11%) or always (27%) use latrines. Some reasons for these low indicators were gathered in the previous (2001) water and sanitation survey conducted by BPHWT (BPHWT 2001b). Boiling of water was absent or rare because the practice was not customary (22%), only believed to be necessary for sick people (40%), or the source of water was perceived to be sufficiently clean (19%). The rare use of latrines was attributed to the fact that using latrines is not customary, that latrines smell bad, or that they are dirty (BPHWT 2001b). Thus, most attributed their water and sanitation habits to aesthetic or customary causes rather than any lack of resources or instability brought on by human rights abuses.

### *Reproductive Health*

The high mortality rates among children and infants in these areas is also likely associated with lack of reproductive services, which leads to increased risk of maternal death. While in absolute terms, the number of women who die during pregnancy or childbirth is low and thus could not be estimated at a population level in this survey, previous work by BPHWT has consistently demonstrated a high risk of death. Reporting of vital events with the traditional birth attendant program of BPHWT has led to estimate maternal mortality ratio (MMR) of 1,000-1,200 per 100,000 live births. This ranks amongst the highest MMRs to be found worldwide. (Table 8) In comparison, Burma's national figures are 360, while that of neighboring Thailand is 44. (UNICEF 2006, Suwanvanichkij et al. 2006) Once again, these figures from eastern Burma are more akin to other countries facing humanitarian disasters rather than figures reported from Rangoon, illustrating the impact of prolonged civil conflict.

As most causes of maternal death are preventable within a functioning health system, this indicator is often used as a proxy for the availability of reproductive health-related care and services. In a



Traditional Birth Attendants receive training in safe delivery practices



TBA after delivering a baby. She uses what she has been taught regarding hygiene and sanitation, knowledge that remains generally uncommon among villagers.

**Table 8 Maternal Mortality Ratio\* among IDPs of eastern Burma, with comparator countries**

|                               | MMR         | Lifetime Risk of Maternal Death (1 in XX) |
|-------------------------------|-------------|---|
| Eastern Burma Conflict Zones  | 1,000-1,200 | 12  |
| Burma                         | 360         | 75  |
| Thailand                      | 44          | 900                                       |
| Congo, Democratic Republic of | 990         | 13  |
| Somalia                       | 1,100       | 10  |
| Rwanda                        | 1,400       | 10  |

\* Maternal mortality ratio: ratio of deaths among women after 28 weeks gestation and before 6 weeks postpartum to 100,000 live births

Source: UNICEF 2006

previous reproductive health survey conducted by BPHWT (2002), the vast majority of deliveries occurred at home, usually only with the aid of a TBA, and IDP women had low levels of knowledge regarding the dangers of pregnancy. This is particularly true in unstable environments far from the Thai border, where women are more likely to deliver in the jungle while hiding from Burmese army patrols. Overall, only 4% of IDP women had access to emergency obstetric care. (BPHWT 2002)

In the current survey, workers questioned respondents about the use of birth control and whether they received iron supplements during their last pregnancy, both of which are further measures of availability of reproductive health services. Overall, both contraceptive use and access to iron supplements were low. Approximately 80% of respondents had never used contraceptives, while only 40% received any iron supplements during their previous pregnancy. The crude birth rate was high, at 41.8 per 1,000 population, comparable to Rwanda (41), Sierra Leone (47), Somalia (45), and Afghanistan (49) (UNICEF 2006). Burma's official rates, in contrast, are 20 per 1,000 population. (UNICEF 2006)

Information was not gathered on whether respondents desired more children or not, and thus unmet contraceptive needs cannot be estimated from these data. However, according to an earlier reproductive health survey by BPHWT, 59.8% of respondents have reproductive needs that are not met. (RH Survey 2002) The data on iron supplements varies widely by region, with anywhere from 7.6% to 71.6% of women receiving them while pregnant. This is probably dependent on whether BPHWT or other medical teams happen to visit the woman during her pregnancy; if they do not, she is unlikely to obtain the supplements herself. Taken together, these figures indicate that access to critical reproductive services is severely restricted in these settings.

#### **IV. HUMAN RIGHTS VIOLATIONS AND THEIR IMPACTS ON HEALTH INDICATORS**

Although data collection by BPHWT initially involved standard population health measures, it quickly became apparent to the staff that the major public health issues faced by IDPs in eastern Burma were closely linked to civil conflict and widespread human rights abuses inflicted upon them by armed groups, primarily the *Tatmadaw*. Thus, it was recognized that BPHWT's work, while important, deals with the downstream effects of war and poverty, which is unlikely to produce significant sustainable gains in population health unless the upstream determinants are improved. Noted one of the field medics, "What is the point of building latrines and clean water systems if the people will be forced to move?" With the goal of collecting quantifiable data to elucidate the health effects of these abuses, BPHWT in 2003 began to collect information on human rights violations (HRVs) and their impacts on health on a population level.

In the final module of the survey, respondents were asked specifically about human rights issues faced by the households over the past 12 months (see Appendix A). The responses are summarized in Table 9. The numbers shown are the percentage of households by region where at least one household member suffered the form of

**Table 9 Proportion of households among internally displaced population reporting selected human rights violations**

| <b>Region</b>                                      | <b>Forced labor</b> | <b>Soldier violence</b> | <b>Forced displacement</b> | <b>Food destroyed/looted</b> |
|--|---------------------|-------------------------|----------------------------|------------------------------|
| Karenni State                                      | 47.7%               | 0.0%                    | 0.0%                       | 0.0%                         |
| Toungoo District, northern Karen State             | 5.7%                | 2.1%                    | 45.4%                      | 71.6%                        |
| Nyaunglebin District, northwestern Karen State     | 0.0%                | 1.7%                    | 60.5%                      | 18.5%                        |
| Thaton District, western Karen State and Mon State | 33.8%               | 3.8%                    | 0.0%                       | 27.5%                        |
| Papun District, northeastern Karen State           | 36.2%               | 0.5%                    | 4.1%                       | 12.6%                        |
| Pa'an District, eastern Karen State                | 74.1%               | 0.3%                    | 0.0%                       | 17.3%                        |
| Dooplaya District, southern Karen State            | 11.9%               | 1.8%                    | 0.6%                       | 30.2%                        |
| Tenasserim Division, southern Burma                | 37.3%               | 7.5%                    | 14.2%                      | 33.9%                        |
| <b>Average</b>                                     | <b>32.9%</b>        | <b>1.9%</b>             | <b>9.0%</b>                | <b>25.7%</b>                 |

abuse in the preceding 12 months.

Among the human rights violations included in the short survey, the most common abuses suffered by respondents and their households were forced labor and food insecurity, at 32.9% and 25.7% of the population respectively. Almost 2% had reported soldier violence (being shot at, beaten, or stabbed) and 9% had been forced to move. As can be seen from Table 9, there is a wide variation in the prevalence of HRVs between different areas. For example, it appears that in territories more solidly controlled by the SPDC or its allies, such as in Karenni State and in Pa'an District, forced labor is the most common abuse encountered, while in areas that are more contested, such as Nyaunglebin and Toungoo Districts, forced displacement is the most common abuse suffered. The others, with varying levels of control by different groups, witness degrees of human

rights abuses that lie in between. However, caution must be used in the interpretation of these patterns, as the survey was not designed nor powered to detect major differences in HRV types between these different areas.

## **Forced Displacement**

As noted earlier, one of the cornerstones of the Burmese military junta's counter-insurgency policy (the Four Cuts Policy) is forced relocation, which was particularly widespread after 1996. This policy has been widely applied in the "black zones" of the eastern frontiers, including Mon, Shan, Karen, and Karenni States and Tenasserim Division. (Risser et al. 2004; TBBC 2004) Although the estimated numbers involved between 1996 and 2002 are approximately 600,000, the degree to which villagers have been affected by this policy has not been quantified. (Risser et al. 2004; TBBC 2004) Further, many others have fled as a result of other human rights abuses by the Burmese military.

As seen in Table 9, 9% of households have been displaced specifically due to security reasons (and not primarily economic pressures alone) in the 12 months previous to the survey. Of those that fled in this time period, 57% did so more than once, and 13% moved four or more times, repeatedly moving as SPDC columns moved and the degree of risk changed. Although the exact reasons for displacement were not captured in this rapid assessment, it includes both households who fled to avoid forced labor and other human rights violations at the hands of soldiers, in addition to those who were ordered by SPDC troops to move to a relocation site or face the risks of death and or torture. BPHWT medics observed that in many of the areas controlled by the SPDC, villagers are also often forced to flee because they were no longer able to comply with demands for forced labor and "contributions" to the Burmese soldiers.

The proportion of people affected varied widely depending on the situation prevailing in the region and on the particular population served by BPHWT in each region. No displacement was reported in



Photo: HURFOM



Villagers forced to take flight into the jungle. Forced displacement was significantly linked by the HHR survey to adverse health outcomes, including increased rates of mortality and malnutrition.

the Karenni ceasefire area. In other areas, such as Thaton District and Dooplaya District, the prevalence of displacement is low, perhaps due to an informal ceasefire between the active armed groups or because many who have been forced to relocate have already fled to another region or to neighboring Thailand. (KHRG 2005a) In sharp contrast, Nyaunglebin District in northwestern Karen State, a heavily contested area subject to the SPDC's Four Cuts Policy, 60% of households had moved at least once in the preceding year; of these, 32% moved twice, and 28% moved three or more times. Noted a BPHWT member who worked in this area, "people had to run away four times, then came back:" their movements depending on those of the SPDC columns.<sup>1</sup> A similar situation has been unfolding in Toungoo District during the time the survey was conducted, hence the high rates of displacement (45.4% of households in the previous year). Nyaunglebin, Taungoo, and parts of Papun Districts are the current targets of a massive *Tatmadaw* offensive, largely against ethnic Karen villagers, which has displaced over 15,000 people. (Gray 2006; Shah Paung 2006a; Shah Paung 2006b; Bangkok Post 2006a)

In statistical analyses performed on the HHR data, displacement was significantly linked to several adverse health outcomes. Families which have had to flee their homes for security reasons at least once in the previous 12 months *had 2.4 fold higher odds of child (under 5) deaths compared to families who had not had to flee.*

Noted one medic working in Dooplaya District, the displaced villagers "face many problems. They have to face food shortages, their children lose their opportunity to study, and they also have more health problems, particularly malaria, diarrhea, and dysentery. Malaria, anemia, diarrhea, dysentery and ARI are less serious among people who don't flee."<sup>2</sup>

<sup>1</sup> interview with BPHWT medic from Nyaunglebin region, September 2005

<sup>2</sup> interview with BPHWT medic from Dooplaya region, September 2005

Forced displacement is also closely linked to malnutrition, with those households displaced at least once in the preceding year 3.1 times more likely to have malnourished children, compared to those who have not been displaced. Displacement can affect the frequency of meals, because families often flee their villages without adequate cooking utensils, making it hard to cook regular meals in the forest. Many villagers also say that when they are in hiding in the forest and SPDC forces are in the area, they only cook at night for fear that the troops will spot the smoke of cookfires from the surrounding hills if they cook by day. (KHRG 2005b)



Landmines produced and planted by the SPDC

### Landmine injuries/deaths

Burma is a country with one of the highest numbers of landmine victims per year, with up to 1,500 killed or injured annually according to some estimates, although this is believed to be a significant underestimate, given that the brunt of this burden is borne by those living in rural, war-torn Karen and Karenni States. (ICBL 2000; Risser et al. 2004; ICBL 2005a; Kyaw Zwa Moe 2005) Landmines are used extensively both by the SPDC and ethnic armies, including the KNLA. The SPDC usually deploys landmines around its military camps, along roadsides, and along pathways the officers believe are used by KNLA forces. SPDC troops are also known to landmine pathways, abandoned villages, rice storage barns and crop fields targeted at villagers in areas which the regime is trying to depopulate, preventing the villagers from returning. (KHRG 2005c) SPDC forces do not notify villagers where they have planted mines and very rarely remove these mines. The KNLA manufactures simple mines out of explosive, pellets, and AA batteries, wrapped in plastic and encased in bamboo or plastic piping. These are placed along pathways and along roads used by SPDC forces and are also used to spring ambushes. (KHRG 2005c) Though the KNLA warns local villagers about mine placement, many villagers still detonate these mines. As with other regions of the world with substantial mapped and



Villager injured by a landmine while searching for food is being transported to a safe area for treatment. The SPDC is known to target villagers in areas the regime is trying to depopulate.



Elderly landmine victim with medics as they prepare for amputation. He received the injury while returning to the site of his destroyed village.

unmapped landmines, the burden of landmines falls disproportionately to non-combatants.

The 2004 HHR survey documents, for the first time, the widespread impact of landmines (including unexploded ordinances) at a population level. Thirteen households (0.7%) surveyed in these conflict zones had one or more members injured or killed by landmines in the preceding 12 months alone. This is equivalent to a rate of 13.4 per 10,000 persons per year and is consistent with earlier BPHWT surveillance data, showing that in 2002-2004, the rate of landmine deaths was 11.3 per 10,000 persons per year. The risk of landmine injuries or death is highest in contested areas in northern and western Karen State, particularly in Thaton District, where all three major armed groups are active (SPDC, DKBA, KNLA) and involved in the extensive laying of landmines. In areas more firmly under the control of the SPDC or ceasefire groups, such as Tenasserim Division and Karenni State, the risk is slightly lower, but not significantly different.

This high rate of landmine injuries, in addition to the 17 new injuries seen at the Mae Tao Clinic in 2004 alone, suggests that the 82 *total* landmine casualties reported by Burma to the International Campaign to Ban Landmines each year is a significant underestimate. (Mae Tao Clinic 2005, ICBL 2005b) Furthermore, BPHWT data also confirms that this problem disproportionately affects ethnic minorities in the “black zones” of eastern Burma, in some of the most impoverished areas of the country. The lack of care in these areas often means long delays before reaching treatment, delays that are often fatal. For the survivors, already often living below subsistence level, being crippled means worsening poverty as they are unable to help forage for food or supplies, or help earn a living, which has negative health implications not only for the individual but also for the entire family. (ICBL 2000; Internally Displaced People News 2004; Risser et al. 2004; Altsean, 2005) Those not wounded by mines are often also profoundly affected as fear of mines often limits foraging or travel, with significant impact on economic security and access to services, including healthcare. (Belak 2002; Altsean 2005)



rice pot intentionally  
destroyed by SPDC

### **Food destruction and looting**

Over a quarter of all families surveyed reported that part or all of their food supply (including fields, rice and other food supplies, or livestock) had been taken or destroyed over the past year (Table 9). This figure only accounts for food directly taken and/or destroyed, including through informal taxation by armed groups (SPDC, DKBA, and KNU), but does not include indirect causes of food insecurity for other reasons, such as forced labor, which detracts from ability to farm fields, or abandonment of crops as a result of forced relocation.

Theft or destruction of food assets was not reported in northern Karenni ceasefire areas. In more contested areas, however, this HRV was much more widespread, particularly in areas in which the Four Cuts Policy is known to have been more vigorously applied, such as Toungoo District in northern Karen State, where others have already documented the systematic destruction of crops and food supplies by SPDC soldiers to force villagers away from the hills and into SPDC-controlled villages along vehicle roads. (KHRG 2005b) Here, 71.6% of respondent families reported having suffered food destruction and/or looting, the highest amongst all regions surveyed. Thus, not only is food destruction or theft deliberately used to support local SPDC battalions but it also is used as a counterinsurgency tool, despite the hardship it exacts on the local populace. Explained one medic operating in Tenasserim Division:

“People are cultivators. When SPDC troops come, they demand things [livestock and money]. If they don’t catch any villagers or get what they demand, they destroy the village and the villagers’ trees and crops. Last year people were not allowed to harvest their paddy crop, causing famine. SPDC troops did this as a form of revenge against the people, because they think the people support the KNU.”<sup>3</sup>

interview with BPHWT medic from Tenasserim region, September 2005

Noted another worker operating in Pa'an District, "When SPDC or DKBA [units] visit our area, they usually demand rice, other crops, and domestic animals to eat. This kind of demand may be as much as 20% of the community's resources. They don't pay anything for this."<sup>4</sup>

In many of these areas, the practice is more formalized, with the SPDC imposing crop quotas as a form of taxation, as has been described in the past by several other organizations in contested areas, particularly rural Shan State. (SRDC 2006, TBBC 2004) Farmers were often forced to hand over a specified amount of produce per acre to the authorities, reimbursed at just a fraction of the market price. Respondents have noted that even when crops fail as a result of natural disasters, this quota is not reduced. Despite claims from the SPDC that this practice was stopped in 2003, one BPHWT medic from Dooplaya District, where almost a third of respondents had undergone food destruction and looting, reported that:

"This year people had to go and get permission from the SPDC to grow paddy, and they had to state the acreage of their field.... It's not true that the SPDC has stopped the rice collection system. They collect it indirectly, through the Nyein Chan Yay group [a Karen armed group working with the SPDC] or the DKBA, then lie to the community by saying they have nothing to do with those two groups."<sup>5</sup>

The same health worker also noted that "if a child of a farmer joins the KNU, they confiscate all his crops. Particularly in the Kyaikdon area, the SPDC confiscated everything.... Some of this confiscation is done by the DKBA or the Peace Group [a Karen armed group allied with the SPDC]."

Of all the HRV asked about in the HHR survey, food destruction and looting are most closely tied to adverse health outcomes, particularly the ultimate one, mortality. Families whose food supplies or crops had been partially or totally taken or destroyed in the

<sup>4</sup> interview with BPHWT medic from Pa'an region, September 2005

<sup>5</sup> interview with BPHWT medic from Dooplaya region, September 2005

previous 12 months were 50% more likely to have lost family members, both adults and children. This close link has been borne out in field observations made by the medics. Toungoo District, facing increased militarization and the brunt of the SPDC's Four Cuts Policy, has seen a particularly high incidence of food and crop destruction (71.6% of households within the past 12 months). Noted one medic working in this heavily-contested area:

“Their [the villagers'] food was destroyed, and if their tools for cultivation were also destroyed then they only have nothing to half [of their crops remaining], and malnutrition is a threat. If they cannot work for their daily livelihood then there are no crops, so they have nothing to eat. They have to seek food and shelter by moving to new places, using new routes and new cultivation sites, and that creates higher probability of landmine injury. Usually when their food is destroyed their clothing and other belongings are destroyed as well, leaving them more exposed to malaria and other illnesses.”<sup>6</sup>

The prescient observation made by medics linking food insecurity and landmine injuries is borne out epidemiologically: those families who have had their food supply or crops taken or destroyed within the past year had 4.6 fold higher odds of having had a landmine injury compared to families who did not experience this human rights violation. Given the remote areas in which these injuries occur, many victims succumb to injuries sustained as a result of landmine injuries before they are able to reach appropriate medical care.

Other significant sources of morbidity in IDP populations in the “black zones” of eastern Burma are also intimately linked with food destruction and looting. In families who have suffered seizure or destruction of their food supply within the past year, adults had a 1.7-fold higher odds of having malaria at the time of the survey compared to those in households that have not had their food taken or destroyed. Explained one BPHWT health worker: “Malaria does not result directly from food destruction. But it makes people travel

<sup>6</sup> interview with BPHWT medic from Toungoo region, September 2005



Remains of a village after it has been burned out by SPDC troops.



BPHWT medics providing care to IDPs in the jungle. Because of the lack of adequate facilities, care must be provided wherever possible, often on plastic sheets or bamboo mats.



BPHWT providing mine-risk education to villagers



IDPs receiving medical care in the jungle. Medics maintain contact with communities, and will follow them into the jungle to provide care.

greater distances to find food, and on the way they sleep at night without mosquito nets and get malaria.”<sup>7</sup> Noted another medic, operating in contested Toungoo District, “This [correlation] is feasible, especially for mothers and children. When their food has been destroyed, perhaps their cultivating tools as well, they have to move and sleep without proper shelter or mosquito nets, so they may get malaria.”<sup>8</sup> This is consistent with the findings of BPHWT’s 2001 malaria survey, where “Among adults, participants reported higher levels of instability in areas that also had higher levels of malaria. Compared to people who did not move in the last year because of violence, those who moved 2 or more times were 1.5 times more likely to have malaria in the last year.” (BPHWT 2001c)

In addition, households whose crop or food supply had been partly or completely taken or destroyed in the past year were 4.4 times more likely to have moderately malnourished children, and 2 times as likely to have severely malnourished children, compared to families who had retained their food supplies. Noted one BPHWT worker:

“It’s true that displacement can lead to malnutrition, because people have to leave their villages. They can carry only small amounts of food and other personal needs, and the lack of food can cause malnutrition especially in children. In the new place they may not have enough water, and bad weather and [insect] vectors also cause morbidity. People need a secure place to live and to cultivate. People from XX village have more stability, but people in XY village often have to flee to hiding places, because their area is just two hours’ walk away from SPDC troops. They have to shift according to the movements of the SPDC.... The SPDC is active in XY village area, they came and burned people’s paddy barns. In XX village area they came and cut down betelnut trees.... Near XZ village in XY village tract, the SPDC came and destroyed villagers’ crops.... Not only do people have to flee without being able to return in time for the harvest,

<sup>7</sup> interview with BPHWT medic from Nyaunglebin region, September 2005

<sup>8</sup> interview with BPHWT medic from Toungoo region, September 2005

but the SPDC troops also set fire to their paddy.”<sup>9</sup> *[the villages mentioned were included in the survey]*

## **Forced Labor**

Many reports have been published detailing that forced labor is commonly employed by the Burma Army and its allies against civilians, particularly ethnic minorities. (Global Witness 2003; ERI 2003) So often reported is this practice that the International Labour Organization specifically recommended that their constituents “review their relations with Myanmar and take appropriate measures to ensure that such relations do not perpetuate or extend the system of forced or compulsory labour in that country.” (ILO 2000) Furthermore, in a report released in 2005 by the ILO, *a Global Alliance Against Forced Labour*, the example of Burma was specifically cited as a tragic case study in which the State and, in particular, the military, can perpetrate forced labor with impunity. (ILO 2005)

The HHR survey conducted by the BPHWT in the conflict zones of eastern Burma provide the first population-based estimates of the degree to which this violation is widespread throughout the IDP populations served by the BPHWT. Almost a third (33%) of households overall had at least one family member forced to work against their will in the preceding twelve months, with a higher percentage reported in areas more solidly controlled by the SPDC and their allies, such as Pa’an District. One health worker noted:

“They [SPDC] said they are developing and promoting the local area for development, but actually they are building and extending roads and setting up more camps with more soldiers to expand their area of control. ... Even though there is no fighting, people have to work as porters and to construct roads and bridges. At the same time they are ordered to carry supplies or food for soldiers at the camps and outposts and they are given nothing....”<sup>10</sup>

<sup>9</sup> interview with BPHWT medic from Dooplaya region, September 2005

<sup>10</sup> interview with BPHWT medic from Pa’an region, September 2005

Similarly, in northern Karenni State, where a ceasefire agreement exists between an armed ethnic minority group, the KNPLF, and the regime, forced labor is also common, showing that even after the cessation of hostilities, HRVs against the civilian population remain widespread.

In contrast, Toungoo and Nyaunglebin Districts report extremely low incidence of forced labor. Although this may be a reflection of reality in these areas, as noted above, the survey was neither designed nor powered to detect these differences. Indeed, the difference may also have been due to differences in sampling: the populations reached by backpack teams in these regions consist almost entirely of internally displaced hill villagers. These people evade any contact with SPDC forces, so they are only subject to forced labor if captured.

In BPHWT analyses, forced labor was closely tied to adverse health outcomes. For example, households that had undergone forced labor in the last twelve months of the survey had 1.6 times higher odds of a family member having diarrhea in the two weeks prior to the survey, compared to those who had not undergone forced labor, although the link between these two are not immediately evident. Most of the forced labor that takes place in the eastern conflict zones is the building of roads and other infrastructure projects and portering supplies for SPDC military columns. Villagers pressed to work for the Burmese government are usually away from home for days, drinking unfamiliar water, eating in unhygienic conditions and sleeping outdoors. Noted one health worker from Toungoo District, “People who are forced to work have a greater likelihood of contracting diseases like diarrhea. This is because they have to go and work at sites where there is no water; when it is time to eat they have to take their food without washing their hands, making it possible to contract diarrhea.” A BPHWT supervisor from Papun District concurred: “Forced labor cases get diarrhea not because of the forced labor, but possibly because they have to travel to do the work. When they are allowed to eat it is under very unhygienic conditions, but they have to eat and the result is diarrhea. Not only diarrhea, they can contract other diseases as well because of the heaviness of the work.”<sup>11</sup>

<sup>11</sup> interview with BPHWT medic from Papun region, September 2005

In BPHWT analyses, forced labor also had a significant impact on nutritional status: families who had performed forced labor in the preceding 12 months had a 2.1 times higher odds of night blindness, an indicator of serious Vitamin A deficiency, compared to families who had not done forced labor. In the areas served by BPHWT, already deep in poverty, forced labor takes away time that families need to do their own work, miring them deeper in poverty. One worker from Pa'an district noted, "If we can work we will have enough to eat, but now we cannot work and we have to fight for our lives. When we harvest a crop, we don't get to keep it all because we have to share it with the local military authorities."<sup>12</sup> For other foodstuffs such as livestock, fruits, and vegetables, instead of being consumed, these are often sold to give families the money to pay 'fees' in lieu of further forced labor, or to buy additional rice, which forms the staple diet (KHRG, 2003:15). The result is a less varied and more rice-specific diet, increasing the risk of malnutrition.

## **Soldier violence**

Overall, soldier violence is a common occurrence, with 1.9% of households (almost 1 in 50) reporting that a household member had been shot, stabbed, or beaten within the past year. BPHWT intentionally selected a narrow definition of soldier violence to minimize potential bias from subjective interpretation of "violence." Threats to life or property, while commonly reported by field staff and other organizations working in the conflict zones of eastern Burma were not included. As seen in Table 9, the HHR survey documented not specific case reports, but the fact that soldier violence occurs in nearly all regions surveyed. In the BPHWT population this amounts to approximately one household per village, enough perhaps to ensure that the village is effectively intimidated.

In most of the regions served by BPHWT, SPDC and DKBA soldiers and officers are free to arbitrarily detain, torture, assault or kill villagers without charge or evidence, allowing ongoing violence committed with impunity to continue.

<sup>12</sup> interview with BPHWT medic from Pa'an region, September 2005



Villagers are forced to build a road as part of the SPDC's border area development program.



Villagers are forced to carry Burma Army supplies while a soldier (at bottom left) supervises. Almost one third of surveyed households reported an incidence of forced labor, which has been tied to adverse health outcomes such as diarrhea and malnutrition.



Medics treat a gunshot wound



Porter killed by the SPDC. SPDC and DKBA are free to detain, torture, assault or kill villagers with impunity.

## V. HEALTH CARE ISSUES IN THE CONTEXT OF HUMAN RIGHTS VIOLATIONS

As seen from the previous section and summarized in Table 10, below, not only are some select human rights violations common in the IDP populations surveyed in eastern Burma, they are also very closely linked to adverse health consequences.

Table 10 **Selected Human Rights Violations and their relationship to Adverse Health Consequences**

| <b>Human Rights Violation in Preceding 12 months</b> | <b>Linked Health Consequence</b>                             | <b>Odds Ratio*</b> |
|--|--|--------------------|
| <b>Forced Relocation</b>                             | ◆ Childhood (under 5) death                                  | 2.4                |
|  | ◆ Childhood malnutrition                                     | 3.1                |
|  | ◆ Decreased use of contraception                             | 6.1                |
|  | ◆ Landmine injury  | 4.5                |
| <b>Food Insecurity</b>                               | ◆ Overall death  | 1.5                |
|  | ◆ Moderate child malnutrition in household                   | 4.4                |
|  | ◆ Severe child malnutrition in household                     | 2.0                |
|  | ◆ Landmine injury  | 4.6                |
|  | ◆ Head of household suffering from malaria at time of survey | 1.7                |
| <b>Forced Labor</b>                                  | ◆ Diarrhea in two weeks prior to survey                      | 1.6                |
|  | ◆ Night blindness (vitamin-A deficiency)                     | 2.1                |

\*Ratios compare the odds of the linked health consequence compared to households that have not suffered this human rights violation. Ratios greater than 1 signify that the consequence is greater.

Summarized one medic working in Pa'an District, in describing the situation of IDPs living in remote, contested areas:



BPHWT medics treat IDPs that have no other access to healthcare.

“People have no opportunity to take care of their health, because they live in instability. Their lives are very hard. ... In my opinion the main reason is the situation, because the situation is unstable. If villagers have to move, they have no chance to take care of their health. Another thing is that mortality is higher in the mountains than in the plains. Plains villagers can act for their health because they have more knowledge and a more stable situation. People in the mountains have less knowledge and face an unstable situation, so they suffer more health problems. They cannot focus on health because they have to focus on getting enough food. For example, someone would like to help his family stay clear of diarrhea and malaria, but he has to work very hard just to get food so he can't afford to buy nets or long sleeve shirts or even to boil the water. Instead he must work in the rain, and falls ill.”

Human rights violations not only lead to increased risk of health consequences, but also a recurring theme expressed by BPHWT staff is that these also lead to worse outcomes, much of this driven by lack of access to care. In the areas where BPHWT operates, there are already significant barriers to accessing care common to Burma, including lack of facilities for health-related services, widespread poverty, a lack of infrastructure, and a dearth of skilled personnel, especially those versed in ethnic minority languages and culture. Summarized one BPHWT medic operating in Toungoo District:

“The SPDC set up a clinic in XY area but it has no medicines, and the medicine prices are so high that the villagers can't buy them. The ICRC [International Committee of the Red Cross] is in XY doing water and sanitation, but they haven't come themselves, they've only sent some of their [Burmese] staff. They provide latrines, but only in XY village itself. In other villages, our Backpack teams can't reach all the villages because it's too far between villages. The KNU has one clinic, but only the 2 or 3 nearest villages can reach it.”<sup>13</sup>

interview with BPHWT medic from Toungoo region, September 2005

Physical insecurity as a result of HRV exacerbate these already harsh limitations on access, precluding villagers from healthcare services at all in many of the areas served by BPHWT. Summarized another health worker from Pa'an District:

“Perhaps because of the civil war, there are not enough clinics or health care services. Some health care services come from BPHWT, but not enough. We've noticed that some people go to towns to get treatment and health care services, but most people don't have enough money and it's hard to travel or go to town [because of SPDC/DKBA movement restrictions]. Many die from treatable diseases.”<sup>14</sup>

One clear impact can be seen in women's reproductive health. Women who had been displaced in the year prior had a 6.1 fold lower odds of using contraception compared to women who had not been displaced. In a setting where the fertility rate is high (see Figure 1), conditions such as malaria (Table 6) and malnutrition are prevalent, and access to healthcare services problematic, the result is a tragically high maternal mortality ratio, as seen in Table 8.

A BPHWT worker from Papun District succinctly summarized:

“People have none of the essential needs, like clean water, clothing, mosquito nets and medicines for illnesses like malaria, dysentery, and diarrhea. They don't have enough food and other things, so old women, mothers and small children are particularly likely to suffer from malnutrition, anemia and other problems. Their lack of health education or knowledge make the situation worse – they don't know what to eat and how they should eat. In sum, the lack of enough food, different illnesses and unstable conditions are the main causes of their poor health and malnutrition.”

<sup>14</sup> interview with BPHWT medic from Pa'an region, September 2005

## CONCLUSION

This report fills an important gap in information regarding IDP populations in eastern Burma. Although it is already known that the health situation in Burma is precarious, and that those living in the frontiers of Burma, primarily ethnic minorities, suffer disproportionately, an extensive accounting of human rights abuses at the population level and the consequences for basic health indicators has not been conducted. This report is the first to quantify the relationship, confirming that long-term disinvestment in health, coupled with civil conflict and abrogation of human rights, particularly by those very individuals tasked with upholding law and order, have decimated the health of civilians.

Basic health indicators collected by BPHWT show a striking disparity compared to official figures from Rangoon, already some of the worst in Asia. In fact, indicators collected in IDP areas of eastern Burma bear more resemblance to other areas facing humanitarian disasters, such as Sierra Leone, Rwanda, the Democratic Republic of the Congo, or Angola, than those reported officially by the Burmese government to international organizations such as UNICEF. Not only do these measures indicate a humanitarian catastrophe, the prevalence of conditions which drive such figures and the disproportionately high morbidity and mortality in these populations are also more indicative of this.

Malaria continues to be the single most commonly diagnosed reason for death, with overall 12.4% of the IDP population at any time infected with malaria. Other top reasons for death are largely preventable with timely and appropriate care. Malnutrition rates are unacceptably high and access to clean water and latrines is low. Access to reproductive health is minimal and maternal mortality rates are at least fourfold higher than the rest of Burma, already the highest in the region. All together, these data strongly suggest that health figures reported by Rangoon severely underestimate the conditions and hence the needs in these areas which are forbidden to international humanitarian agencies.



A group of children watch as a medic cares for an IDP's infant. Expansion of this border-based health care is advisable, both in the interests of IDP communities and Burma's neighbors.



BPHWT transports medical supplies by foot to target areas.

Similarly, while human rights abuses are known to be widely occurring in the eastern conflict zones of Burma, this report quantifies the prevalence of several key human rights abuses within these communities, specifically collecting information about forced labor, forced displacement, destruction or looting of crops and food supplies, arbitrary violence by soldiers, and landmine injuries. Results from the HHR survey indicate that abuses against the civilian population are indeed widespread in these conflict zones. In addition, the types of abuses prevalent in a community vary widely and may depend on the military/political context of the area in which they occur. For example, forced labor appears to be more common where there is a greater degree of control by the SPDC, while forced relocation, landmine injuries, and food destruction/looting appear to be more common in areas more contested between the SPDC and ethnic-based rebels. However, caution must be exercised in interpreting regional differences in prevalence of specific HRVs, as the HHR survey was not designed for or powered to detect such differences.

The strength of association between these human rights violations and a wide range of health outcomes strongly suggest that significant improvements in the overall health of these communities is not achievable solely through delivery of health care services, even though priority conditions were identified through our surveys. Without addressing factors which drive ill health and excess morbidity and mortality in these populations, such as widespread human rights abuses and inability to access healthcare services, a long-term, sustainable improvement in the public health of these areas cannot occur. Even when health services can be delivered under extreme constraints, long-term benefits to the population are severely limited. Several villages served and clinics established by BPHWT have already been burned down by SPDC troops. Others have been forced to shut down due to security considerations.

Despite being able to collect valuable information on IDP populations in the frontiers of Burma, there are a number of limitations to this data, particularly as this is the first HHR survey conducted by BPHWT. The collection processes in each area and also local

conditions were not consistent, which, coupled with the fact that the HHR survey was not designed initially for this purpose, makes it difficult to produce comparable regional estimates for the figures obtained through this process. Further, in many communities, much less data was obtained depending on the security situation or hesitance of the potential respondents or community leaders to participate, fearing for their security. Literacy issues, loss of data forms during displacement, and problems with recalling instructions also posed problems in the collection of data. However, altogether, these issues should not detract significantly from the fact that our data indicates a humanitarian catastrophe in the eastern conflict zones, a disaster closely linked with widespread human rights abuses.

The community managed border based approach to health care utilized by BPHWT is particularly relevant now, given the increasing paranoia and belligerent stance taken by the SPDC. Despite a “gentleman’s agreement” resulting in a ceasefire between the SPDC and the largest armed opposition group, the KNU in 2003, at the time of this writing, fighting has renewed in some of the same districts in which the HHR survey was conducted, especially Toungoo and Nyaunglebin Districts. (Shah Paung 2006a, Shah Paung 2006b; Gray 2006) Renewed fighting, coupled with worsening abuses against the population by the *Tatmadaw*, including forced labor, destruction of food supplies, and forced relocation, has displaced over 15,000 ethnic Karen villagers. (Bangkok Post 2006a; Bangkok Post 2006b; Bangkok Post 2006c; Shah Paung 2006c) Other ceasefires with ethnic-based armed groups have also shown signs of unraveling, especially those with several Shan and Kachin groups. (Sai Wansai 2005, DVB 2006) Despite the ongoing humanitarian and public health disasters which threaten to spill across Burma’s borders, rather than prioritize these issues, the junta continues down the road to further isolation, by moving its capital to Pyinmana, a sparsely populated town approximately 250 miles north of Rangoon currently being depopulated of nearby Karen villages, and further restricting humanitarian aid agencies working in the country. (Beyrer et al 2006; Bangkok Post 2006b; Bangkok Post 2006c)

As a result, increasing numbers of agencies, unable to work in such a restrictive environment, have exited or significantly curtailed programs, including the Global Fund for HIV/AIDS, TB, and Malaria, the International Committee for the Red Cross, and MSF France. The latter, in particular, had been operating, albeit through Rangoon's blessing, in areas along the eastern frontier facing fighting between ethnic-based rebels and the SPDC. Explained Hervé Isambert, the MSF Program Manager, "We had to face up to the facts: the Myanmar authorities do not want independent, foreign organizations to be close to the populations they want to control. The authorities don't want anyone to witness how they organize the forced displacement of the population, the burning of villages, and forced recruitment [for forced labor]... Today, we have to acknowledge that it was incredulous to think that room existed for a humanitarian organization to work there." (MSF 2006) He further concluded, "... it is impossible to assist people living in these conflict areas, given the conditions required to carry out independent humanitarian action." (MSF 2006)

Given the increasing difficulties of addressing humanitarian crises from within central Burma, despite the insecurities involved in a border-based approach, more consideration should be given to supporting and expanding such efforts, particularly since it is clear that the bulk of morbidity and mortality from treatable conditions is borne by DP communities along the frontiers. In addition, these are the areas which pose the greatest potential for spread of poorly controlled infectious diseases to Burma's neighbors, undermining their public health gains. (Beyrer et al. 2006) Expanding such programs must go hand-in-hand with ongoing monitoring and further research into the needs of these neglected populations, particularly in the evaluation of the conditions that underpin these health issues, conditions which often have their basis in misgovernance and abrogation of the rule of law, conditions which must be addressed concurrently with the ongoing delivery of healthcare services.

# RECOMMENDATIONS

## **To Burma's neighboring countries**

- (1) To encourage support for community-managed border-based health programs that are providing health care to displaced persons in Burma and collect vital health information about this neglected population.
- (2) To continue and increase cooperation between their respective public health ministries and community-managed border-based health program implementers in order to coordinate effective disease control programs.

## **To the United Nations, Association of South East Asian Nations & the International Community**

- (3) To continue and increase pressure on the SPDC in order to halt their human rights abuses such as forced labor and forced displacement which are driving the health crisis in eastern Burma.

## **To United Nations Agencies & International Non-Governmental Organizations providing aid to Burma**

- (4) To provide humanitarian assistance to the people of Burma by building up human resources for community-managed organizations which can provide long term development for the actual needs of the people.
- (5) To recognize that without addressing factors which drive ill health such as widespread human rights abuses and inability to access healthcare services, a long-term, sustainable improvement in the public health of these areas cannot occur and therefore to include in their programs transparent efforts to address these human rights issues with the SPDC.

- (6) To provide support for community-managed border-based health programs that are providing health care to displaced persons in Burma and collect vital health information about this neglected population.
- (7) To work together with community-managed border-based health program implementers to coordinate effective disease control programs.
- (8) To support efforts to protect the life and safety of health workers in the border regions of Burma.

### **To Burma's Opposition Movement**

- (9) To further promote human rights protection programs for people in Burma
- (10) To draw up plans for a nationwide health policy and health system according to international human rights standards for national health requirements.
- (11) To continue and improve efforts to monitor and expose the health crisis in Burma's border regions and their underlying causes.
- (12) To continue and increase support for community-managed border-based health programs.

### **To all Peoples of Burma**

- (13) To increase awareness of the root causes of the health crisis in Burma and become more actively involved in setting up community-based primary health care programs.

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## **APPENDIX: SURVEY QUESTIONNAIRES**

## MORTALITY SURVEY

July-Dec 2004

Date:

Interviewer Number:

Interviewee Number:

Area Code:

Village Name:

Interviewer: If possible, interview MOTHERS ONLY (one per household). Introduce yourself and thank her for participating in the survey. Tell the mother that you will ask her some questions about her household. ALL QUESTIONS REFER TO THE HOUSEHOLD.

For all of the questions, if the mother has difficulty with dates, you can use seasons or important days to help you calculate age or if the birth or death occurred in the last 12 months.

1. List the age and gender of all people living in this household.  
(Don't forget to include yourself, children, and infants).

| Age*<br>(list interviewee first) | Gender | MUAC<br>(in 1-5) | Night Blind<br>Yes/No/<br>Don't know | Has had in the last 2 weeks: Yes/No/Don't Know |          |                 |                           |
|----------------------------------|--------|------------------|--------------------------------------|--|----------|-----------------|---------------------------|
|                                  |        |                  |                                      | Malaria  | Diarrhea | Received<br>CRS | Paracheck<br>test (+)/(-) |
| 1. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 2. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 3. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 4. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 5. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 6. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 7. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 8. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 9. ( ) years ( ) months          |        |                  |                                      |  |          |                 |                           |
| 10. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |
| 11. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |
| 12. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |
| 13. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |
| 14. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |
| 15. ( ) years ( ) months         |        |                  |                                      |  |          |                 |                           |

**Circle one answer for question 2 through 6:**

2. Has your youngest child under 1 year had anything to eat or drink besides breast milk in the last 24 hours?  
Yes No Don't know Refused

3. How often do you drink boiled, disinfection-filtered, or chlorinated water?  
Always Sometimes Rarely Never Don't know Refused

4. How often do you use a latrine?  
Always Sometimes Rarely Never Don't know Refused

5. Do you use any of these currently to avoid pregnancy?  
OCP Depo Condom None Other Don't know Refused

6. Did you receive iron supplementation ("energy pills") during your last pregnancy?  
Yes No

7. For anyone from your household who died during the last 12 months, list the age of death, gender, and cause of death. (Be sure to include babies that may have lived only a short time).

| Age of death*           | Gender | Cause of Death | CAUSE OF DEATH<br>1 - Diarrhea<br>2 - Malaria<br>3 - ARI<br>4 - Landmine<br>5 - Gunshot<br>6 - Pregnancy<br>7 - Other<br>8 - Don't know |
|-------------------------|--------|----------------|---|
| 1. ( ) years ( ) months |        |                |   |
| 2. ( ) years ( ) months |        |                |   |
| 3. ( ) years ( ) months |        |                |   |
| 4. ( ) years ( ) months |        |                |   |
| 5. ( ) years ( ) months |        |                |   |
| 6. ( ) years ( ) months |        |                |   |
| 7. ( ) years ( ) months |        |                |   |
| 8. ( ) years ( ) months |        |                |   |

**Health and Human Rights Survey**  
July-Dec 2004

The following questions ask about your experiences with security in your village. This information will be used for BPHWT programs and to increase awareness of the situation in your village. We realize that the questions are sensitive and personal. All responses will be kept confidential. Please stop me if you have any questions. Please tell me if you prefer not to answer a particular question.

Do you want to complete the survey? (circle one)      Yes / No

**Record answers in the box. Record only one number per question.**  
**Circle "Don't know" or "Refused" if applicable.**

*For the next 4 questions, tell us one number that best describes your situation. Write "0" if the event never happened.*

- |   |  |
|---|--|
| 1. In the past 12 months, <b>how many people</b> , from your <b>household</b> were forced to work against their will (include people who have died)?      | <b>People</b><br>Don't Know<br>Refused |
| 2. In the past 12 months, <b>how many people</b> from your <b>household</b> were shot at, stabbed, or beaten by a soldier (include people who have died)? | <b>People</b><br>Don't Know<br>Refused |
| 3. In the past 12 months, <b>how many people</b> from your <b>household</b> had a landmine or UXO injury (include people who have died)?                  | <b>People</b><br>Don't Know<br>Refused |
| 4. In the past 12 months, <b>how many times</b> has your <b>household</b> been forced to move because of security?  | Time<br>Don't Know<br>Refused          |

*For the next 2 questions, please circle one answer.*

- |   |                   |
|---|-------------------|
| 5. In the past 12 months, has your food supply (including rice field, paddy, food stores, and livestock) been taken or destroyed?     | Yes<br>Don't Know |
| 6. In the past 12 months, has <b>anyone</b> from your <b>household</b> been prevented from receiving health care because of security? | Yes<br>Don't Know |

*Finally, we would like to ask a question about violence against women.*

- |  |               |
|--|---------------|
| 7. How many houses are in your <b>neighborhood</b> ?   | Don't know    |
| 8 a. Are there women or girls in your <b>neighborhood</b> who have been forced to have intercourse against their will in the past 12 months? | No<br>Refused |
| b. If yes, how many?   | People        |

Thank you very much for your help. We appreciate your support of BPHWT data collection.

# Chronic Emergency

## Health and Human Rights in Eastern Burma



## Chronic Emergency

### Health and Human Rights In Eastern Burma

2006



နယ်လွှဲတွင် ဆေးကုသမှုပေးသည့် ကျန်းမာရေးအဖွဲ့  
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