

# HIV / AIDS

*in the*

## MEKONG REGION

Cambodia, Lao PDR, Thailand, & Viet Nam

Current Situation, Future Projections,  
Socioeconomic Impacts, and Recommendations



June 2003

POLICY is funded by the U.S. Agency for International Development (USAID) under Contract No. HRN-C-00-00-00006-00, beginning July 7, 2000. The project is implemented by the Futures Group International in collaboration with the Centre for Development and Population Activities (CEDPA) and Research Triangle Institute (RTI).



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Prepared by

POLICY Project

For

Bureau for Asia and the Near East  
U.S. Agency for International Development



June 2003



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## LIST OF ABBREVIATIONS

AHRN	Asian Harm Reduction Network
AEM	Asian Epidemic Model
AIDS	acquired immune deficiency syndrome
ARV	antiretroviral
ASEAN	Association of Southeast Asian Nations
CARAM	Coordination of Action Research on AIDS and Mobility (in Asia)
CEDPA	Centre for Development and Population Activities
CPN+	Cambodian Positive Network
DFID	Department for International Development (United Kingdom)
DOTS	direct observation treatment strategy
GAP	Global Access Project (as in Health GAP)
GBV	gender-based violence
GIPA	Greater Involvement of People Living with HIV/AIDS
HAART	highly-active antiretroviral therapy
HIV	human immunodeficiency virus
ICAAP	International Congress on AIDS in Asia and the Pacific
ILO	International Labor Organization
IDU	injecting drug user
MAP	Monitoring the AIDS Pandemic
MTCT	mother-to-child transmission
MSM	males who have sex with males
NGO	nongovernmental organization
NPC	(Wat) Norea Peaceful Children
PDR	People's Democratic Republic (of Laos)
PLWHA	people living with HIV/AIDS
RTI	Research Triangle Institute
STI	sexually transmitted infection
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

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# MAP OF THE MEKONG REGION



# INTRODUCTION

The Mekong Region derives its name from the river that runs through the region. The Mekong River finds its source in the Tibetan plateau before making its way nearly 3,000 miles across Southeast Asia toward the South China Sea. This region includes Burma,<sup>1</sup> Cambodia, Lao People's Democratic Republic (PDR), Thailand, Viet Nam, and parts of southern China.<sup>2</sup> The region is also the epicenter of Asia's HIV/AIDS pandemic. At the end of 2001, of the estimated 40 million people living with HIV/AIDS (PLWHA) worldwide, about 6.6 million were from Asia and the Pacific. Of the 6.6 million PLWHA in Asia and the Pacific, nearly one million were from the four countries of the lower Mekong Region – Cambodia, Lao PDR, Thailand, and Viet Nam, which are the focus of this report (see Table 1).

	<b>Total population, 2001</b>	<b>Estimated number of PLWHA, 2001</b>
Cambodia	13,441,000	170,000
Lao PDR	5,403,000	1,400
Thailand	63,584,000	670,000
Viet Nam	79,175,000	130,000
<b>Total</b>	<b>160,603,000</b>	<b>971,400</b>

*Source: UNAIDS (2002)*

The first cases of HIV in the Mekong Region were diagnosed in males who have sex with males (MSM) in Thailand in 1984. Heterosexual transmission of HIV was detected in the country in 1985 and then began to occur on a wider scale by 1989 (Monitoring the AIDS Pandemic [MAP], 2001). Early on, Thailand documented high HIV prevalence levels in female sex workers and injecting drug users (IDUs). Lao PDR and Viet Nam reported their first cases of HIV in 1990 (UNAIDS/World Health Organization [WHO], 2002b, 2002d). HIV prevalence remains low in Lao PDR, though increasing integration with the rest of the region could facilitate further spread of the virus. While adult HIV prevalence in Viet Nam also remains low, the country has witnessed a dramatic increase in HIV prevalence among groups that practice high-risk behaviors, particularly IDUs. In Cambodia, the first HIV infection was found in a man donating blood in 1991, though the virus was found in Cambodian refugees in Thailand as early as 1989 (Chantavanich, 2000). Since then, Cambodia has experienced the fastest growing HIV/AIDS epidemic in Asia. Both Cambodia and Thailand have generalized epidemics that are affecting groups that practice high-risk behaviors, as well as spreading to the population at-large.

Several factors have converged in the Mekong Region to provide a unique, fertile breeding ground for the spread of HIV/AIDS. To begin with, injecting drug use is a significant problem throughout the region

<sup>1</sup> Since 1989, Burma's military leaders have promoted Myanmar as the conventional name of the country. This is not a change recognized by the U.S. government and the country is, therefore, referred to as Burma throughout this document.

<sup>2</sup> Burma and Yunnan Province in China are considered part of the Greater Mekong Region. While these areas do indeed share many characteristics with the four countries presented here, and their HIV/AIDS epidemics have implications for the entire region, this booklet focuses on the countries of the lower Mekong Region.

(Reid and Costigan, 2002). The “Golden Triangle,” encompassing parts of Burma, China, Lao PDR, and Thailand, is a leading supplier of opiates, particularly heroin. Drug trafficking routes dissect the Mekong Region and provide easy access to illicit drugs. IDUs, particularly in Thailand and Viet Nam, were among the first populations to report high levels of HIV infection. Another contributing factor is the degree and nature of mobility both within and between countries in the region (Chantavanich, 2000). Political instability and displacement have uprooted thousands of families and individuals – for example, refugees from Burma in Thailand. People are also drawn to border and urban areas in search of improved economic opportunities. These border and urban areas are sites for the booming sex industry in Southeast Asia. Mobility, increased tourism, the presence of peacekeeping forces, the opening up of formerly centrally-planned economies, human trafficking, a lack of educational and economic opportunities for women and girls, and other factors have all facilitated the growth of sex industries. The mobility of people to and from areas providing access to commercial sex and illicit drugs, and thereby increasing potential risk for HIV infection, also serves as a bridge between areas of high and low HIV prevalence.

As evidenced by this brief overview, countries in the Mekong Region must develop strategies to address *multiple* epidemics. Unprotected heterosexual sex and injecting drug use are the primary modes of transmission in the region, though MSM and mother-to-child transmission (MTCT) must not be ignored. Developing comprehensive approaches that target a number of transmission modes (e.g., not simply focusing on sex work alone), improving access to care and support, building political commitment, increasing resource allocation in the face of economic crises (such as the one that hit Asia in the late 1990s), reducing stigma and discrimination against PLWHA, operationalizing the Greater Involvement of People Living with HIV/AIDS (GIPA) Principle, strengthening regional collaboration and multisectoral approaches, and addressing the factors that put people at risk for contracting HIV (e.g., behavioral, economic, social, and cultural factors) remain significant challenges.

This report is designed as an advocacy tool to assist policymakers and other relevant stakeholders in stimulating dialogue about sustainable, contextually appropriate responses to HIV/AIDS in the Mekong Region. An exhaustive review of the complexities and data related to the pandemic is beyond the scope of this document. Instead, this report seeks to provide an overview of the current HIV/AIDS situation in the Mekong Region; present projections as to where the pandemic is headed in the future using the best available data; highlight some of the key social and economic impacts of the pandemic; and discuss strategies that will be needed to reduce the spread of HIV/AIDS, improve care and support, and mitigate associated impacts.

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## Understanding HIV and AIDS

AIDS stands for **acquired immune deficiency syndrome**. It is a disease caused by the **human immunodeficiency virus** or HIV. The virus acts by weakening the immune system, making the body susceptible to and unable to recover from opportunistic infections (e.g., tuberculosis). A person is said to have developed AIDS when there has been significant **deterioration of the immune system**; it is generally characterized by the presence of specific opportunistic infections and cancers.

A person may be infected with HIV for a considerable time without showing any symptoms. There is often an **incubation period** from initial infection with HIV to the development of AIDS. Data from developed countries suggest that the incubation period may last from 8–10 years; in developing countries, however, malnutrition, the presence of other diseases (e.g., tuberculosis, malaria, hepatitis B), and limited access to health care services can all increase stress on the person's immune system and can accelerate progression from HIV infection to the development of AIDS. Since symptoms may not appear for a number of years, many people do not know that they are infected with HIV. During all of this time, however, they are capable of transmitting the virus to others. For children, the incubation period is often much shorter than in adults because their immune systems are not yet fully developed.

While there is currently no cure for HIV/AIDS and vaccines and microbicides to prevent HIV transmission are still under development, **antiretroviral (ARV) therapy** has been shown to extend life for many people. ARV therapy delays the progression from HIV infection to development of AIDS by suppressing viral load. Although they are still very expensive, costs for ARVs are declining. Significantly, more international resources for care and treatment are becoming available through international donors and mechanisms such as the Global Fund to Fight AIDS, Tuberculosis and Malaria.

More aspects of prevention, care and support, and mitigation are discussed in further detail in Section 4.



◆ Section One ◆

# SETTING THE STAGE

This section focuses on the history of the HIV/AIDS pandemic in the Mekong Region. It provides basic facts about HIV/AIDS, outlines the primary modes of transmission and other contributing factors, and presents current estimates on the magnitude of the pandemic.

*“Because of the typical pattern of individual-to-individual spread of the virus through sex and needle sharing, HIV epidemics always begin as geographically localized outbreaks and only later diffuse out over wider areas of the country.”*

~ Monitoring the AIDS Pandemic, 2001

# The HIV/AIDS Pandemic in the Mekong Region

Though linked geographically, the four countries of the lower Mekong Region are quite diverse – politically, economically, and socially. Thailand and Cambodia are both democratic states under constitutional monarchies. Thailand, despite an economic crisis in Asia in the late 1990s, has served as a model of economic development in the region, while Cambodia is striving to rebuild after years of civil war, genocide, and political instability. Lao PDR and Viet Nam are both socialist republics that are moving slowly toward free-market reforms and decentralization. At the same time, proximity as well as some shared interests and cultural values join the countries' fates together. These undercurrents of divergence and confluence shape the nature of the HIV/AIDS pandemic, which, in turn, increasingly influences the region's socioeconomic conditions.

HIV was first detected in the region among MSM in **Thailand** in 1984. Early on, IDUs – particularly in Bangkok – and sex workers were also found to have high levels of HIV infection. By 1989, the virus had spread, primarily through heterosexual contact, from groups that practice high-risk behaviors to the general population. Thailand's HIV infections and AIDS cases are concentrated more in the northern part of the country but have been found in all 76 provinces. Estimates suggest that HIV prevalence at the national level and among some subgroups peaked during the mid- to late-1990s before starting to decline during the past few years.

**Cambodia** was the next country in the region to experience an explosive HIV/AIDS epidemic. Screening of blood donors revealed the country's first HIV infection in 1991, although HIV was detected in Cambodian refugees in Thailand two years earlier. Due to decades of conflict, Cambodia has witnessed a high degree of population migration – both within the country and between countries. Most of Cambodia's PLWHA reside along the Thai–Cambodia border and in the south and central provinces. Sex workers and males seeking treatment for sexually transmitted infections (STIs) (often used as a proxy for clients of sex workers) were among the first groups to report high levels of HIV infection. While still the highest in the region, Cambodia's national adult (15–49) HIV prevalence appears to have declined in recent years.

National adult HIV prevalence remains low (below 1 percent) in Viet Nam and Lao PDR. Since the detection of the country's first HIV infection in Ho Chi Minh City in 1990, **Viet Nam** has seen a rapid increase in HIV prevalence among IDUs and, to a lesser extent, sex workers and clients of sex workers. **Lao PDR**, a sparsely populated, mountainous country, has yet to experience the dramatic HIV/AIDS outbreaks that are occurring in some other parts of the Mekong Region. The country's first cases of HIV infection were detected in mobile populations and sex workers in the early 1990s. Despite low prevalence, proximity to drug trafficking routes, increasing integration with the region, and high STI levels in some populations could facilitate the further spread of the virus in both countries.

The HIV/AIDS epidemics in the four countries of the lower Mekong Region are linked to and influenced by their neighbors, China and Burma. With a population of about 1.3 billion people, **China**'s national adult HIV prevalence is relatively low (below 1 percent), yet it was home to an estimated 850,000 PLWHA in 2001 (UNAIDS, 2002). Yunnan Province in southern China has been hit hardest by HIV/AIDS and about half of the country's cases are found in this province alone. HIV was first detected in **Burma** in 1988. Access to information regarding the epidemic in Burma is limited, however, recent estimates suggest that national HIV prevalence could range from just under 2 percent (UNAIDS/WHO, 2000) to nearly 3.5 percent (Beyrer, et al., 2003). Both injecting drug use and the sex industry have influenced the spread of HIV in these areas.

(For more on the epidemiology of the HIV/AIDS pandemic in the Mekong Region, please see Chantavanich 2000; MAP, 2001; Reid and Costigan, 2002; UNAIDS, 2002; and WHO, 2001.)

# Modes of Transmission

HIV should be understood not as something that is limited to certain groups, but as a virus that is transmitted in specific ways. Four modes of transmission account for HIV infections:

- **Unprotected sexual contact** – refers to vaginal, anal, and, in rare cases, oral sex, and applies to both heterosexual and same-sex partners;
- **Injecting drug use** – via contaminated needles, syringes, and other drug paraphernalia;
- **HIV-infected blood** – transfusions using unscreened blood or blood products; and
- **Mother-to-child transmission (MTCT)** – transmission during pregnancy, delivery, or breastfeeding.

HIV is not transmitted by mosquitoes or casual contact, such as shaking hands, kissing, or sharing bowls and utensils.

Unprotected heterosexual contact is the primary mode of HIV transmission in each country in the Mekong Region. Thailand and Viet Nam also document sizeable levels of transmission through injecting drug use. Though male-to-male sexual transmission of HIV represents a smaller proportion of all HIV cases when compared to other modes of transmission in the region, MSM are a critical population, particularly in Cambodia and Thailand, because they are at a higher risk for HIV infection and they can also serve as a bridge group to those considered to be at lower risk for infection in the general population.

As the HIV/AIDS pandemic matures and affects more and more women of reproductive age, MTCT will become an increasingly important source of new infections in the region. In general, without prenatal HIV counseling and testing and preventive therapy, about 25 to 35 percent of infants born to HIV-infected mothers will contract the virus. Among those infants who do become infected, transmission may occur during pregnancy (estimated at approximately 30 percent worldwide), during delivery (55 to 65 percent), or following delivery through breastfeeding (5 to 15 percent) (United Nations Regional Task Force on Prevention of Mother-to-Child Transmission of HIV, 2001).

In addition, countries in the region must continue to work to ensure the safety of their blood supplies and related products. Rigorous guidelines and support structures must be put in place to improve blood testing and encourage voluntary (nonpaid) blood donation. In areas like Southeast Asia, where safe blood supplies are scarce, blood donation using paid blood donors is a common practice. Unfortunately, in the absence of proper guidelines, resources, training, and monitoring, this practice may involve re-using needles and other unhygienic procedures. It may also attract donors who are themselves at high risk for HIV infection.

## Key Concept: MTCT Plus

Traditionally, MTCT strategies have focused primarily on protecting the infant from HIV transmission either during pregnancy and childbirth or through breastfeeding. Increasingly, however, health advocates and public officials are recognizing the need to provide support for mothers, not just their children, as failure to do so condemns the children to becoming orphans at an earlier age. “MTCT Plus” strategies emphasize not only preventing HIV transmission from mother-to-child, but also providing care, support, and treatment to mothers and other affected family members. These approaches are designed to improve support for children and also improve the viability of families. Comprehensive MTCT Plus packages would include voluntary HIV counseling and testing, prophylaxis and treatment for opportunistic infections, ARV therapy, and psychosocial support, among others.

## High-risk “Groups” vs. High-risk “Behaviors”

The preceding sections have discussed some of the first groups to document high levels of HIV infection in the Mekong Region, including MSM, IDUs, female sex workers, and mobile populations. While HIV infection may be first detected in certain groups, this does not mean that there is something inherent in those particular groups of people that causes HIV infection. Rather, it is the practice of high-risk *behaviors* – such as unprotected sex and sharing needles – in the presence of the virus that initially promotes transmission within so-called “high-risk groups.” Since HIV is transmitted primarily through unprotected sex and contaminated needles, during the early stages of an epidemic, the virus is likely to spread among those groups that practice high-risk behaviors. Groups that practice behaviors that put them at risk for HIV infection are also referred to as “vulnerable populations” – though, again, it is important to remember that HIV is not limited only to those groups.

Unfortunately, association with HIV/AIDS often confounds the situation for populations that are already stigmatized or marginalized by society. Stigmatization and association of HIV/AIDS with certain groups promotes a disregard for the underlying factors that contribute to high-risk behaviors, provides a false sense of security for those who are not members of the stigmatized group, and hinders meaningful prevention and care efforts.

When trying to develop prevention, care, and support programs, policymakers and program planners must also consider the diversity that exists within groups that practice high-risk behaviors. Each vulnerable group actually comprises several subgroups. For example:

- In Viet Nam, the most established HIV/AIDS epidemic is found among older male **IDUs** in the central and south provinces. Young men and, increasingly, young women in the south are merging into this epidemic, while a new epidemic is also emerging among young male IDUs in the north (WHO, 2001).
- Among female **sex workers** in Cambodia, many women have been trafficked against their will, some have turned to sex work due to economic or other hardships, and still others have migrated from other countries and face challenges due to language and cultural barriers.
- Another example is **MSM** in Thailand, a group encompassing male sex workers; males who have sex with both males and females, either within or outside of commercial sex relationships; males who have sex only with males; and transgenders (sometimes called *katoey*).
- **Mobile populations** across the region are also a varied group – one that includes refugees, truck drivers, migrant workers, military or uniformed personnel, and tourists, among others.

An understanding of the needs and circumstances of these diverse groups must inform policy and program development.

# Linked Epidemics

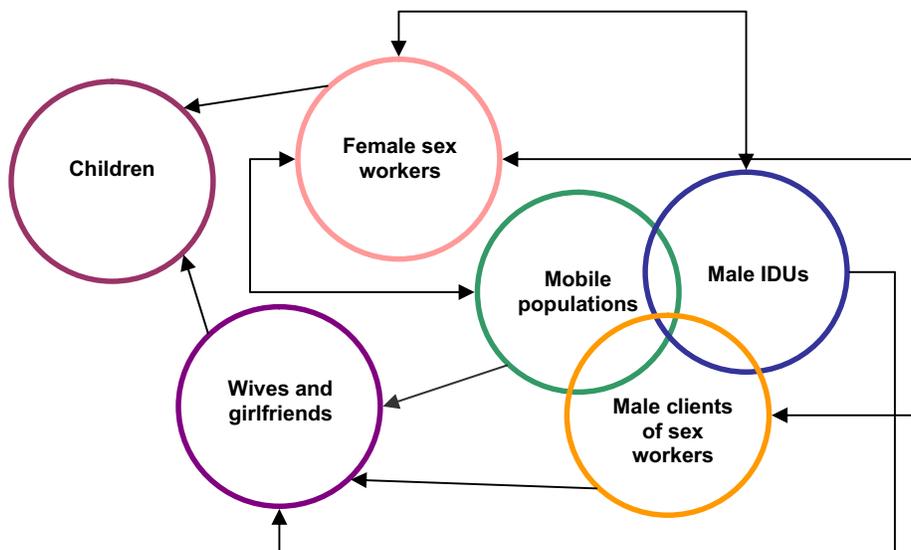
Given that HIV is transmitted by *behaviors* and is not confined to particular *groups*, it should not be taken for granted that HIV will naturally remain confined to groups that practice high-risk behaviors. Rather than being self-contained within certain groups, Figure 1 illustrates some of the ways in which HIV can spread from vulnerable populations to the general population (though other modes are also possible). It also shows how individuals can be included in more than one vulnerable group at a time (e.g., mobile populations who are also IDUs). Groups that can facilitate the spread of HIV from vulnerable groups to the general population are sometimes called “bridge” populations.

Sexual activity between vulnerable groups or between vulnerable groups and those at lower risk is the primary mechanism for spread of HIV across groups (Family Health International/ IMPACT, USAID, and Department for International Development [DFID]/United Kingdom, 2001). For example:

- IDUs and their sexual partners, including regular partners and sex workers;
- Males who have sex with both males and females;
- Sex workers and their non-commercial sexual partners; and
- Male clients of sex workers and their regular sexual partners.

Concentrated epidemics affecting vulnerable groups can become linked or can spread to the general population. The East-West Center, for example, using its Asian Epidemic Model (AEM), demonstrated how an epidemic concentrated among IDUs in Thailand or Cambodia could influence and hasten the spread of HIV through a heterosexual epidemic. While behaviors (e.g., unprotected sex, injecting drug use) can link or bridge epidemics across different groups, population mobility and socioeconomic factors can influence the spread of epidemics across countries.

**Figure 1. An Illustration of How HIV Can Spread from Vulnerable Groups to the General Population**



## Contributing Factors

Unprotected sex and injecting drug use have already been noted as direct modes of HIV transmission in the Mekong Region. Several other contributing factors and risk behaviors facilitate the spread of HIV throughout the region:

- **Poverty.** Economic development has not occurred evenly or equally across the region. More than one-third of the populations of Cambodia, Lao PDR, and Viet Nam live below the poverty line (World Bank, 2000). Though enjoying some economic prosperity, Thailand is also home to impoverished populations. Poverty, low incomes, and high unemployment rates are often associated with high-risk behaviors and the spread of HIV. Women, children, and men may exchange sex for money or other gifts as a means of economic survival, thereby increasing their risk for HIV. Out of desperation, they may also turn to injecting drug use as a means of escape. Families of PLWHA and AIDS orphans may find themselves in a continuous cycle of poverty as resources and family members are lost to the disease.
- **Other sexually transmitted infections.** The probability of transmitting HIV during unprotected sex rises dramatically if either partner is infected with another STI, such as syphilis or gonorrhea. These infections cause inflammation and ulcers that facilitate the transfer of the virus – increasing both HIV infectiousness and HIV susceptibility. Both men and women may have STIs without noticeable symptoms and, therefore, may not seek treatment for long periods of time. Efforts to prevent and treat STIs must be integrated into approaches to address HIV/AIDS.
- **The sex industry.** The sex industry is a significant contributing factor to the spread of HIV/AIDS across the region. Commercial sex is common in the Mekong Region where “men having premarital and extramarital relationships are quietly tolerated” (Chantavanich, 2000, p. 6). The term “direct sex workers” refers to those (generally women) who work in brothels, while “indirect sex workers” includes all genders (women, men, and transgender populations) and refers to those who work from other settings, such as karaoke bars, restaurants, parks, and streets. While interventions such as Thailand’s “100% Condom Use Program” might decrease the spread of HIV and STIs via commercial sex in brothels, the use of condoms by sex workers and male clients with their regular partners (e.g., spouses, sweethearts) tends to be low. In addition, in some countries, there is also an increasing shift from direct to indirect sex work, which is harder to address through condom use programs that target brothels and sex establishments.
- **Human trafficking and sexual exploitation.** Related to the sex industry is the problem of human trafficking, which involves the transport of people (women, children, and men) – generally by coercion or deception – for the purpose of exploitative labor in a new location (United Nations Children’s Fund [UNICEF], 2003). This labor can take on a variety of forms, such as agricultural labor, domestic servitude, and sex work. Unfortunately, extreme poverty in the Mekong Region contributes to the problem of human trafficking as families, under pressure to repay debts, may sell their children to traffickers, while other individuals are lured away by the promise of high paying jobs. Because of its illegal and underground nature, determining the exact number of people trafficked each year is extremely difficult. However, based on work by the U.S. State Department (Richard, 2000), UNICEF (2003) estimates that about one-third of international trafficking in women and children occurs within or from Southeast Asia alone. UNICEF also estimates that about one million children (ages 12–17) are involved in the sex industry throughout Asia – the largest number in the world. Aside from working in exploitative conditions, people who are trafficked are often at an extreme disadvantage due to separation from families and support systems, cultural and language barriers, and lack of control over the decisions affecting

their lives and health. Those who are forced into the sex industry are particularly at risk for STIs, HIV infection, and physical and sexual abuse.

- **Mobility.** The Mekong Region is characterized by a high degree of mobility and migration. Migration occurs between countries and within countries, generally due to political instability, economic factors, and socio-cultural events (e.g., family celebrations, cultural festivals). Urban and border areas are typical destinations for mobile populations. These areas often provide access to commercial sex and injecting drugs. Language and cultural barriers, economic circumstances, lack of support systems, and being away from traditional structures and values also contribute to the vulnerability of mobile populations to HIV. Mobile populations are at risk for HIV infection and, upon returning to their homes, can serve as a “bridge” between areas of high and low HIV prevalence.
- **Stigma and discrimination.** Stigma is “a powerful and discrediting social label that radically changes the way individuals view themselves and are viewed as persons” (Canadian HIV/AIDS Legal Network, 1999, p. 1). The concept of stigma is often described as “internal” or “felt” stigma, which refers to the personal shame associated with HIV/AIDS and the fear of being discriminated against on account of the illness. In contrast, “enacted” stigma refers to actual experiences of discrimination. UNAIDS defines discrimination as “any measure entailing any arbitrary distinction among persons depending on their confirmed or suspected HIV serostatus or state of health.” Lack of information, myths and misconceptions, and judgmental attitudes contribute to stigma and discrimination, which serve as barriers to effective prevention and care efforts. As HIV/AIDS is often associated with taboo behaviors (e.g., drug use), groups that practice high-risk behaviors are doubly stigmatized. Due to stigmatization and a fear of rejection from families and community members, individuals may be afraid to go for testing, deny their level of risk, or refuse to seek treatment. As a result, information is not shared, prevention measures are less effective, and the experiences and insights of PLWHA and those most affected are not used to enhance prevention, care, and treatment programs or alleviate human rights abuses. As it is linked to the success of so many other activities, reducing stigma and discrimination must be a priority for comprehensive HIV/AIDS programs.
- **Vulnerability of women: Socioeconomic and biological causes.** Gender inequality in both the public and private realms contributes to women’s vulnerability to HIV across the region. Social norms discourage the expression of women’s sexuality and limit women’s decision-making authority within relationships, making it difficult for them to access information on HIV/AIDS or negotiate safer sex practices. Limited economic and educational opportunities also make it hard for women to leave relationships that may put them at risk. In addition, domestic violence or gender-based violence (GBV)<sup>3</sup>, often quietly accepted as a private matter, puts women at risk for HIV infection because it also limits their ability to negotiate safer sex practices or leave unhealthy relationships. GBV can also result as a consequence of disclosure of HIV status as women are often blamed or face reprisals for bringing HIV into the relationship. Finally, women are made vulnerable due to biological differences between males and females. During unprotected vaginal intercourse, women are significantly more susceptible to HIV transmission than men because the vagina provides a large surface area that is exposed to and can retain bodily fluids during sex. It

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<sup>3</sup> The United Nations General Assembly *Declaration on the Elimination of Violence Against Women* (1993) defines GBV as any “Any act of gender-based violence that results in or is likely to result in physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.” In this document, our use of the term recognizes that violence against women – in all its forms – often arises from the subordinate status of women in society. This violence may occur either within (referred to as domestic or intimate partner violence) or outside of (e.g., abuse during times of armed conflict) the woman’s personal relationships. We also recognize that GBV is not limited to women alone. Men, for example transgenders or transsexuals, may experience *gender-based violence* because their gender and sexuality conflict with the dominant society’s norms and attitudes regarding masculinity.

is estimated that women are 2–4 times more vulnerable to infection than men during vaginal intercourse.

- ***Substance use as a precursor to injecting drug use and other high-risk behaviors.*** In a recent study, the Task Force on Drug Use and HIV Vulnerability (2000) found that drug use in Asia “continues to increase and new and ever more hazardous and harmful drug use patterns are continuing to emerge” (p. 6). The changing dynamics of drug production and consumption in the region will significantly influence the spread of HIV. Drugs such as methamphetamine, ecstasy, and other amphetamine-type substances are gaining popularity across Asia (Reid and Costigan, 2002). In part influenced by drug supply and demand, those who start out by smoking opium may switch to smoking heroin and then to injecting heroin. Injecting drug use has particularly affected Burma, southern China, Thailand, and Viet Nam. In addition, substance abuse of all forms impairs judgment and increases the likelihood of behaviors, such as unprotected sex, that put one at high risk for HIV infection and other STIs. The movement of people engaged in these risk-associated behaviors along new or expanding drug trafficking routes also contributes to further spread of HIV.
- ***Alternative sexualities, including transgenders and males who have sex with both males and females.*** MSM have been identified as a vulnerable group for HIV infection in the region. Many MSM also have sex with females and, therefore, can serve as a bridge population for HIV transmission. In materials prepared for the 6<sup>th</sup> International Congress on AIDS in Asia and the Pacific (ICAAP), MAP (2001) reported on a study of MSM in Cambodia that found over 60 percent also have sex with females, including sex workers. More research is needed to develop programs to address the role of males who have sex with both males and females in the spread of HIV. Another vulnerable group comprises males who live at least part of their lives as females (e.g., transgenders and transsexuals). Many in this group make a living as sex workers, which increases their risk for HIV infection. In addition, these individuals are so intensely stigmatized and socially marginalized that they have limited access to HIV/AIDS information and services.

# HIV Sentinel Surveillance

The exact number of HIV infections and AIDS cases is unknown because most cases are not reported. Reasons for under- or non-reporting include:

- Limited access to testing and other health care services;
- Inadequate training of health care providers;
- Reluctance of people to seek testing due to the perceived stigma and discrimination that may follow a positive result,<sup>4</sup> as well as lack of access to affordable treatment;
- Reluctance of physicians and nurses to record a diagnosis because of stigma;
- Due to the absence of noticeable symptoms, many people do not know they are infected;
- Lack of clear policies and standards to guide recording and reporting procedures; and
- Given the nature of the disease, which suppresses the immune system, people who have developed AIDS generally die from secondary infections, such as tuberculosis or pneumonia, and those infections are often recorded as the cause of death.

Given the problem of under- or non-reporting, HIV sentinel surveillance systems are used to provide public health officials with a way of monitoring and estimating trends in the pandemic. HIV sentinel surveillance involves testing the level of HIV infection in different subgroups that may be at high risk for infection or that may provide insight into the spread of HIV into the general population. In Asia, tested vulnerable groups often include direct sex workers, IDUs, and STI patients. Groups such as women attending antenatal clinics and police or military recruits are often used as proxies for females and males in the general population.

## Key Concept: Second Generation Surveillance System

Improving upon the first decade of HIV surveillance systems, WHO has developed guidelines for “**second generation**” **surveillance systems**, which are intended to provide a more comprehensive picture of the nature of the HIV/AIDS pandemic (WHO, 2000). In addition to HIV prevalence, the guidelines recommend monitoring the behaviors that are likely to put people at risk for infection (e.g., unprotected sex) and using supplementary sources of information, such as reproductive health surveys and surveillance of other related diseases (e.g., tuberculosis). Data from HIV sentinel surveillance systems can be used to characterize the epidemic as *low-level* (e.g., not consistently exceeding 5 percent in any vulnerable groups), *concentrated* (e.g., prevalence consistently above 5 percent in vulnerable groups but below 1 percent in women attending antenatal clinics), or *generalized* (e.g., prevalence over 1 percent in women attending antenatal clinics).

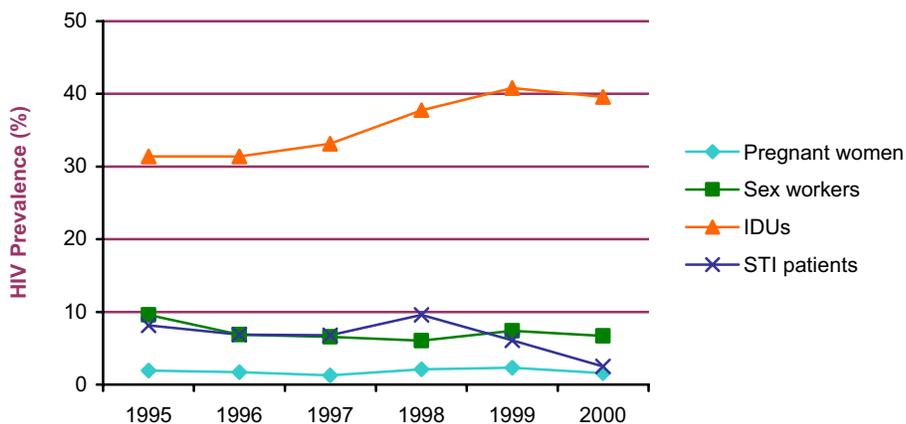
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<sup>4</sup> It is important to note that vulnerable groups, such as sex workers, MSM, and transgender populations, may already face stigma even prior to any diagnosis of HIV-positive status; these groups may fear the double stigma associated with being a member of a group that practices behaviors deemed unacceptable by society as well as being a person living with HIV/AIDS.

The quality of HIV sentinel surveillance systems varies across the Mekong Region. Surveillance systems may be deficient due to lack of resources, training, and policies, or inadequate data collection methodologies (e.g., low samples sizes, non-representative groups used as sentinel populations). However, these data provide the best estimates for the spread of the pandemic in the region and researchers are continuously working to improve surveillance methods. Thailand initiated a surveillance system in 14 provinces in 1989 and expanded it to the entire country by 1990. HIV surveillance began in a limited number of Cambodian and Vietnamese provinces in 1994 and continued to expand throughout the 1990s. Lao PDR's national surveillance system began in 1999. Burma began HIV surveillance among vulnerable groups in 1985, before the country detected its first case of HIV infection, yet these findings are not always widely distributed or used (International Crisis Group, 2002). China's national HIV sentinel surveillance system began in 1995 and focuses on five groups: sex workers, truck drivers, IDUs, pregnant women, and people seeking treatment for STIs. Countries in the region, to varying degrees, also conduct behavioral surveillance surveys to monitor trends in behaviors that influence the transmission of HIV.

Thailand has the most developed HIV surveillance system in the Mekong Region. Using HIV sentinel surveillance reports from 1995–2000, Figure 2 shows how HIV prevalence has changed over time among different subgroups from major urban areas in Thailand.

**Figure 2. HIV Prevalence by Subgroup in Thailand, 1995–2000**



Source: UNAIDS/WHO (2002c)

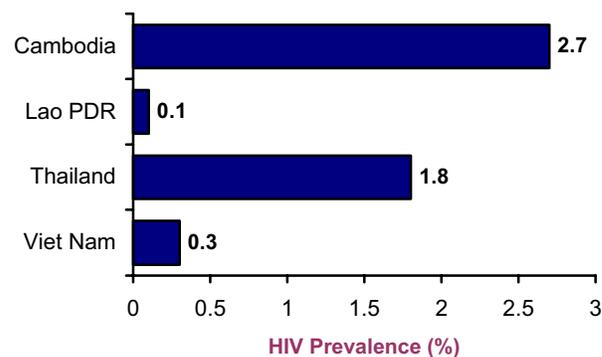
### Key Concepts: Prevalence vs. Incidence

**Prevalence** refers to the overall number of HIV infections while **incidence** is a measure of new infections. A decline in the overall prevalence does not necessarily mean that new infections have been prevented. The prevalence may vary or remain constant, for example, depending on the balance between those who die from AIDS (which decreases prevalence) and the number of new infections (which increases prevalence). The overall prevalence also masks the incidence of HIV in different populations – some subgroups (e.g., female sex workers) may show declines while, for others, the number of new infections may be increasing (e.g., wives and girlfriends of clients of sex workers or IDUs).

## National HIV Prevalence, Number of PLWHA, and AIDS Deaths

Figure 3 shows the national adult (15–49) HIV prevalence for the four countries in the lower Mekong Region in 2001. Thailand and Cambodia are experiencing generalized epidemics with about 2–3 percent of the adult population infected. HIV prevalence is below 1 percent in both Lao PDR and Viet Nam.

**Figure 3. Adult (15–49) HIV Prevalence by Country, 2001**



Source: UNAIDS (2002)

As shown in Table 2, AIDS caused about 75,000 deaths in the Mekong Region and left nearly 370,000 children (under 15) orphaned in 2001. It is the leading cause of death in Thailand, a country where about 670,000 adults and children are currently living with HIV/AIDS. HIV/AIDS most often affects adults of reproductive age, who are also the most economically productive groups and the most likely to be raising families. An estimated 1-in-60 adults in Thailand and 1-in-40 adults in Cambodia are living with HIV/AIDS. Increased deaths among this age group will have significant impacts at the national, community, and family levels.

<b>Table 2. Current HIV/AIDS Situation in the Mekong Region, 2001</b>					
	<b>Estimated number of PLWHA</b>			<b>Children (0–14) orphaned by AIDS</b>	<b>AIDS deaths</b>
	<b>Adults (15–49)</b>	<b>Women (15–49)</b>	<b>Children (0–14)</b>		
Cambodia	160,000	74,000	12,000	55,000	12,000
Lao PDR	1,300	350	<100	...	<150
Thailand	650,000	220,000	21,000	290,000	55,000
Viet Nam	130,000	35,000	2,500	22,000	6,600

Source: UNAIDS (2002)

### ◆ Summary Points ◆

- ✓ The Mekong Region is facing *multiple, yet linked* HIV/AIDS epidemics. The nature of the pandemic varies both within and across countries. Comprehensive, thoughtful approaches must be developed to address each aspect of the pandemic.
- ✓ It is important to be mindful of the difference between high-risk *behaviors* and high-risk *groups*. Associating HIV/AIDS only with certain groups as opposed to particular behaviors (e.g., unprotected sex) stigmatizes those groups, gives a false sense of security to those who are not members of the group, and hinders meaningful prevention, care, and mitigation activities.
- ✓ Factors that facilitate the spread of HIV in the Mekong Region include injecting drug use, the sex industry, migration and mobility, poverty, stigma, and lack of opportunities for women.
- ✓ Low national HIV prevalence in some countries and declining levels in other countries do not guarantee that prevalence will remain low or continue to decline without active community, civil society, and government involvement.



◆ Section Two ◆

# EYES ON THE HORIZON

Using SPECTRUM computer modeling software, this section presents projections of future HIV prevalence and the estimated number of PLWHA and AIDS deaths in the Mekong Region.

*“Clearly, the potential exists for substantial expansion of the HIV epidemic in many Asian societies. But while the potential exists, it is difficult to predict if and when the HIV epidemic will expand in specific Asian countries or how quickly infection levels will rise. HIV prevalence often remains low for years and then suddenly explodes.”*

~ T. Brown, East-West Center, 2002

## Projected Adult HIV Prevalence

National adult (15–49) HIV prevalence rose dramatically in Cambodia and Thailand during the 1990s. Evidence from surveillance data in these countries suggests that, compared to other countries in the region, prevalence is still high but has started to decline in recent years. HIV prevalence appeared to peak in Thailand by the mid-1990s and in Cambodia about 4–5 years later. Adult HIV prevalence is low but slowly rising in Lao PDR and Viet Nam.

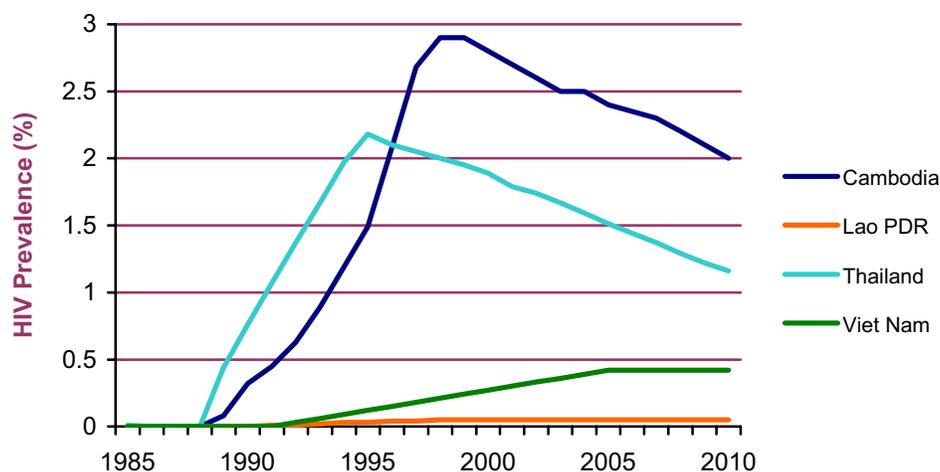
What can we say about future HIV prevalence in the countries of the Mekong Region? Some people have suggested that the experience from Thailand and Cambodia shows that prevalence will not rise above 3 percent in Asia. But the declines in prevalence in these two countries did not occur because of any “natural” epidemic dynamics. Instead they resulted from significant behavior change in both countries. AEM, a computer simulation model of the HIV/AIDS epidemic in Asia developed by the East-West Center, has been used to investigate what would have happened if behavior had not changed. The model shows that HIV prevalence would have continued its rapid rise of the early 1990s and could have reached 10–15 percent before stabilizing. The most relevant lesson from Thailand and Cambodia may be that, with good programs and strong political support, populations can respond to rapidly emerging epidemics and change behavior quickly enough to reduce prevalence.

At the same time, the fact that HIV prevalence is currently low in Viet Nam and Lao PDR is no guarantee that it will remain low forever. Although the overall risk is lower in these countries than it was in Thailand and Cambodia in the early 1990s, there is still enough risk behavior to sustain a growing epidemic. While prevalence may rise slowly, it could eventually reach high levels. AEM simulations show that it may take longer, but prevalence could still reach 3–5 percent in countries that currently have low prevalence. The presence of an epidemic among IDUs in Viet Nam makes it particularly susceptible to a rapid rise in prevalence in the future.

For the purposes of this document, we have conservatively assumed that recent trends in prevalence will continue into the immediate future, as shown in Figure 4. These projections are based on simulations using the SPECTRUM computer modeling system, which was developed by the POLICY Project and is used by UNAIDS and other organizations and national programs to prepare HIV/AIDS projections. The projections would be lower if prevention, care, and mitigation programs become more widely available – and, conversely, much higher if current HIV/AIDS programs across the region are not maintained over time.

*The most relevant lesson from Thailand and Cambodia may be that, with good programs and strong political support, populations can respond to rapidly emerging epidemics and change behavior quickly enough to reduce prevalence.*

**Figure 4. Estimated and Projected Adult (15-49) HIV Prevalence by Country, 1985-2010**



### What is SPECTRUM?

The SPECTRUM computer modeling system, developed by the POLICY Project, is used by UNAIDS and other organizations and national programs to prepare HIV/AIDS projections. SPECTRUM utilizes demographic data and assumptions that are based on the estimates and projections from the United Nations Population Division. Epidemiological patterns – such as the progression from HIV infection to AIDS death, the transmission rate from mothers to children, and the age and sex distribution of HIV infection – are based on regional patterns developed by the UNAIDS Reference Group on Estimates, Models, and Projections. These various data sources are used to project trends in HIV prevalence and the number of PLWHA and AIDS deaths. To learn more about SPECTRUM, please see <http://www.policyproject.com/software.cfm>.

### What is the Asian Epidemic Model?

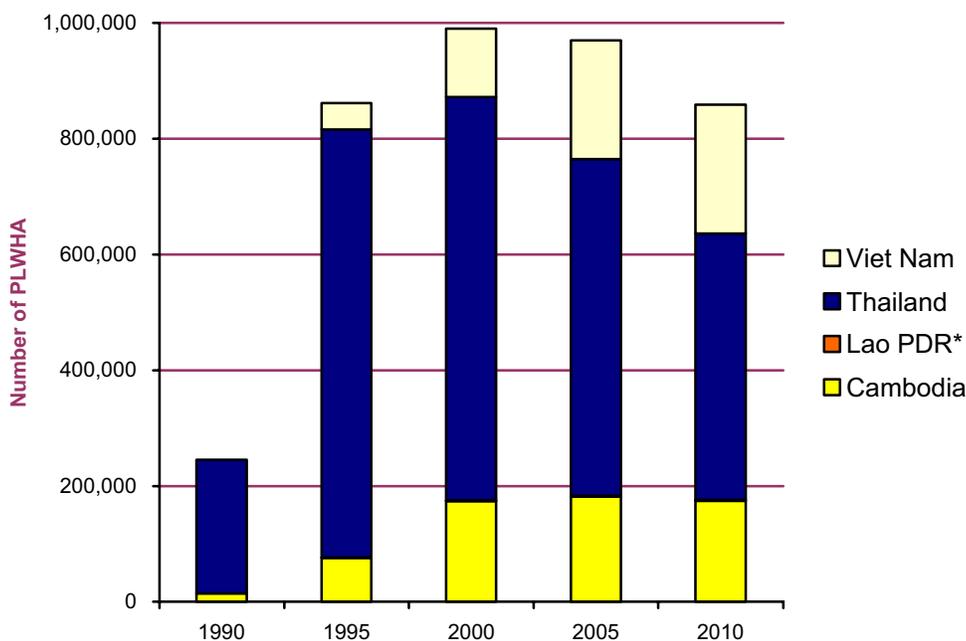
AEM is a computer model that simulates the spread of HIV within a population. It considers HIV transmission within special populations including direct and indirect sex workers, their clients, and IDUs. The latest information on relevant behaviors and population sizes is used to set up the model for a particular country. The latest surveillance information on HIV prevalence in each population is used to calibrate the model to the local epidemic. Then the model can be used to investigate the contribution of past behavior change to current trends and the likely future course of the epidemic with and without additional behavior change. More information about the model is available from the East-West Center/Thai Red Cross Society in Bangkok.

## Projected Number of PLWHA

If adult HIV prevalence levels follow the patterns shown in the previous figure, the number of PLWHA in the Mekong Region has most likely reached its peak at nearly one million in 2000 (see Figure 5). Over the next 10 years, the number of PLWHA is expected to decline in Thailand yet remain relatively stable in Cambodia. At the same time, the number of PLWHA will continue to rise in Viet Nam and, to some degree, Lao PDR (though the number of PLWHA in Lao PDR is projected to reach only about 2,000 by 2010). By 2005, even though Viet Nam's prevalence will be lower than Cambodia's, it will have more PLWHA due to its larger population size. Assuming prevention and care efforts remain at current levels of effectiveness, the number of PLWHA in the region may decline to about 860,000 by the end of the decade.

While the data presented here combine the projected number of HIV infections and symptomatic AIDS cases, it is important to consider distinctions between these two populations. As more and more people with HIV infection develop AIDS, the burden on families, communities, and support services will increase. More resources will be needed in terms of formal health care, informal or home-based care, and associated services (e.g., income-generation activities, support to orphans and vulnerable children, and nutrition counseling and support, among others). So, even though the combined number of PLWHA is projected to decline by 2010, the implications and impacts of the pandemic may actually become more serious throughout the region.

**Figure 5. Estimated and Projected Number of PLWHA by Country, 1990-2010**



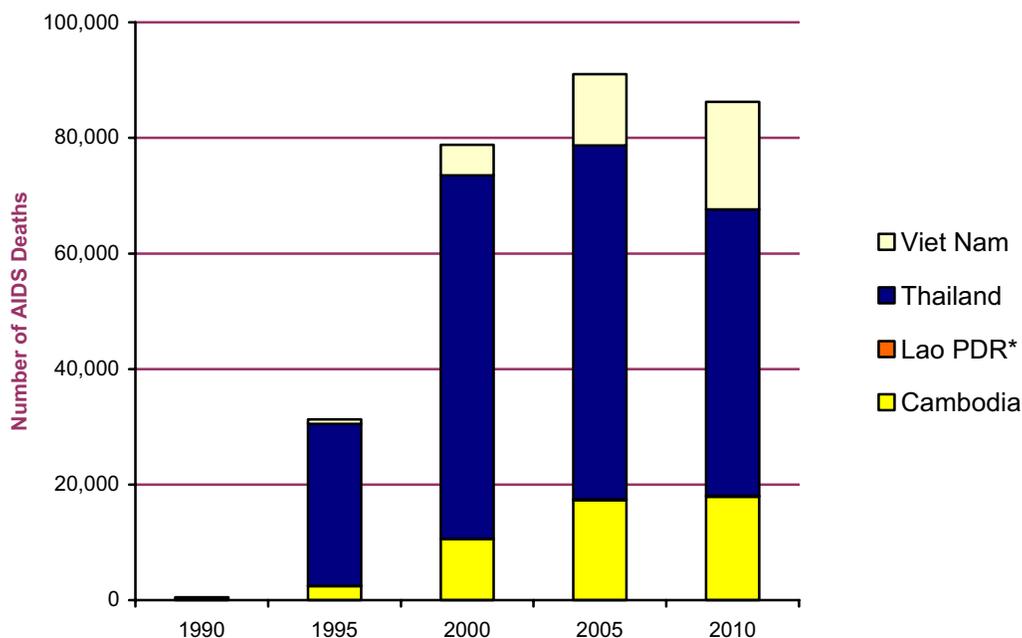
*\*Note: The number of PLWHA in Lao PDR is <2,000 in each projected year.*

## Projected Number of AIDS Deaths

The overall number of PLWHA is influenced by the number of new infections as well as the number of deaths among PLWHA. Where access to treatment is lacking and death rates are high, a declining number of PLWHA should not be taken as a sign of success in the fight against the pandemic. For example, increased access to ARV therapy could extend the lives of PLWHA. In the short-term, however, wide-scale introduction of ARV therapy would reduce the death rate (perhaps by as much as one-half) and consequently would lead to an *increase* in the overall number of PLWHA. In this situation, while the data would indicate more PLWHA, it would also reflect improvement in the quality of life for PLWHA. When interpreting data, then, policymakers and program planners must be mindful of the various factors that influence trends and how these factors impact the achievement of prevention, care, and mitigation program objectives.

Based on recent trends, AIDS is expected to cause between about 75,000–95,000 deaths in the Mekong Region each year throughout the next decade. As shown in Figure 6, the number of AIDS deaths is expected to decline slightly by 2010, yet AIDS will still account for 80,000–90,000 deaths.

**Figure 6. Estimated and Projected Number of AIDS Deaths by Country, 1990–2010**



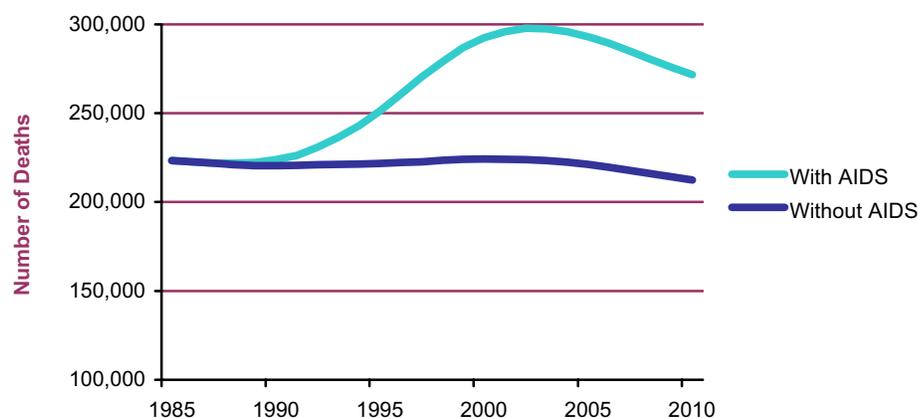
*\*Note: The number of AIDS deaths in Lao PDR is <200 in each projected year.*

## Annual Deaths Among Adults (15–49)

AIDS has become a significant public health concern in the Mekong Region. For example, in September 2001, Thailand’s Minister of Public Health announced that AIDS was *the* leading cause of death in the country – overtaking accidents, heart disease, and cancer. The HIV/AIDS pandemic is increasing the death rate for almost all age groups, with the most significant impact being found among adults ages 15–49. Unlike other diseases (e.g., heart disease), HIV/AIDS affects people during the most productive years of their lives – when they contribute the most to their families, communities, and societies. This is a time when they are supporting families (both children and elderly parents), using the investment in their education and training, and contributing to the economy. Losses among this age group will be particularly significant for Cambodia, which has already lost a generation to decades of civil war and genocide.

Figure 7 presents the projected number of deaths among adults in the region with and without the impact of the HIV/AIDS pandemic. Without AIDS, and assuming a gradual decline in death rates from other causes, the annual number of deaths among adults declines from about 225,000 in 1985 to about 210,000 by 2010. With AIDS, however, the number of deaths approaches 300,000 annually by 2001 and remains between 275,000–300,000 deaths at least until 2010. Regionally, this translates into more than **one million additional deaths** among adults – due to AIDS alone – over the next decade.

**Figure 7. Projected Impact of AIDS on Annual Deaths Among Adults (15–49) in the Mekong Region, 1985–2010**



### AIDS Orphans

UNAIDS estimates that, at the end of 2001, there were about 370,000 children (under 15) in the Mekong Region who had lost one or both parents to HIV/AIDS (UNAIDS, 2002). Increased deaths among adults will unfortunately lead to more AIDS orphans in the near future. Children affected or orphaned by AIDS are often forced to leave school to care for sick parents or may be compelled to work in high-risk situations (e.g., sex work) to support themselves or other family members. Impoverished conditions and lack of educational or employment opportunities increases their own vulnerability to HIV infection.

### ◆ Summary Points ◆

- ✓ While recent trends show declines in national adult HIV prevalence in Thailand and Cambodia, these countries are still home to large numbers of people living with or affected by HIV/AIDS. HIV prevalence and the number of PLWHA are expected to increase in Viet Nam and Lao PDR.
- ✓ Current low levels of prevalence in Lao PDR and Viet Nam are no guarantee that prevalence will remain low in the future. HIV prevalence could eventually increase to 3–5 percent in these countries unless actions are taken now to encourage effective behavior change.
- ✓ Unlike other diseases, HIV/AIDS affects people during the most productive years of their lives – a time when they are contributing the most to their families, communities, and societies.
- ✓ AIDS will cause more than one million additional deaths among adults in the Mekong Region between 2000 and 2010.

◆ Section Three ◆

# ISSUES IN FOCUS

HIV/AIDS affects individuals, families, communities, countries, and regions in a variety of ways. While the pandemic has several consequences, this section highlights six key social and economic implications of HIV/AIDS in the Mekong Region.

*“Particularly in the poorest countries, HIV/AIDS has had and continues to have catastrophic economic and social ramifications. Family and community well-being are being compromised, as well as development progress and national stability.”*

~ U.S. Agency for International Development, 2002

## Women and HIV/AIDS

Worldwide, the HIV/AIDS pandemic is increasingly affecting women, as *new* cases of HIV and AIDS are disproportionately occurring in young women. In the early stages of many types of epidemics, most cases of HIV/AIDS are found in men. This is generally due to the fact that clients of sex workers and IDUs are predominantly male, or that MSM form an affected group. While many female sex workers may be affected by HIV/AIDS in the early stages of an epidemic, the spread of HIV to the general female population is limited. As these types of epidemics mature, HIV is transmitted from male clients of sex workers and IDUs to their girlfriends, wives, and other sex partners. A comparison of the male-to-female ratio of PLWHA in the Mekong Region, based on UNAIDS 2001 estimates, reveals that Cambodia has a nearly equal number of cases in males and females. Thailand, whose situation has been more affected by injecting drug use among males, and Lao PDR and Viet Nam, both still in the early stages of the pandemic, have more cases among males than females. As the Asian epidemics mature, and more women are affected by HIV/AIDS, community-based and national strategies must address the following issues:

### Adult Male-to-Female Ratio of PLWHA, 2001

Cambodia	1.2 : 1
Lao PDR	2.7 : 1
Thailand	1.9 : 1
Viet Nam	2.7 : 1

*Source: Based on estimates from UNAIDS (2002)*

- **Burden of care.** HIV/AIDS programs must address women as individuals but must also recognize their roles within families and communities. In addition to other household or economic responsibilities, women are generally the primary care providers for PLWHA. Because of gender inequalities, women living with HIV/AIDS are also less likely to have access to services for their own health needs. Lack of women's rights to property and inheritance following death of a loved one further threatens the survival of families, as households lose resources and are left even less able to respond when the woman is also diagnosed with HIV/AIDS.
- **Gender inequalities.** Lack of economic and educational opportunities for women, in general, creates a dependence on men, hinders women's ability to negotiate safer sex practices, and limits women's access to information about HIV/AIDS prevention and care services. When gender inequalities intersect with other inequities, such as poverty, women and girls are at greater risk of being forced into situations, such as sex work, that increase their vulnerability to HIV.
- **Stigma and gender.** The stigma surrounding HIV/AIDS – as an STI associated with socially unacceptable behaviors (e.g., sex work) – coupled with social and cultural taboos against expression of women's sexuality, in general, increase women's risk for negative consequences following disclosure of HIV status. Even monogamous, married women may be the ones blamed for bringing HIV into the family or may face other reprisals, including physical violence.
- **Reproductive health services and MTCT Plus.** The potential spread of HIV to the general female population necessitates increased access to prevention methods (e.g., female condoms), expanded PMTCT efforts, and greater support of the health of mothers and other family members. Women living with HIV/AIDS are in need of reproductive health services that include family planning to prevent unintended pregnancies, ARV therapy (during and after pregnancy and childbirth), and support for safe infant feeding practices. In addition, women need ongoing treatment and support – an aspect of MTCT Plus – to help reduce the number of orphans and keep families viable.

Responses to the pandemic must focus on empowering women and providing equal access to education, employment, and health services, as well as safety from sexual exploitation and GBV. Public health messages and community-based interventions should also reinforce values that support mutual respect and improved communication between men and women and shared responsibility for sexual and reproductive health.

## Children Affected by HIV/AIDS

Children affected by HIV/AIDS include children who are themselves living with HIV/AIDS; those who currently have a close family member living with HIV/AIDS; and children who have already lost one or both parents to the disease. By the end of 2001, an estimated 35,600 children (under 15) in the Mekong Region were living with HIV/AIDS (UNAIDS, 2002). In some cases, children, especially those from poor or marginalized households, may be at-risk for trafficking and sexual exploitation, thereby increasing their risk for HIV. Strategies must seek to improve care and support for children living with HIV/AIDS, reduce stigma and discrimination (e.g., ensure access to educational opportunities), prevent MTCT and provide ongoing support to mothers affected by HIV/AIDS, and address the socioeconomic factors that make children vulnerable to HIV infection.

A joint report by UNAIDS, UNICEF, and USAID (2002) estimates that there will be nearly 600,000 AIDS orphans (under 15) in the region in 2010 (see Table 3). Of significance, HIV/AIDS will account for more than 1-in-3 orphans in Thailand and more than 1-in-4 orphans in Cambodia. Children with a family member living with HIV/AIDS and those who are already AIDS orphans face a number of challenges. In many cases, these children – especially girls – must leave school to care for loved ones or contribute to the family’s income. Lack of education and limited occupational opportunities hinder the children’s abilities to prepare for their own futures, which increases their vulnerability for malnutrition, exploitation, and HIV infection. In addition to emotional distress over the loss of a parent, they may also face stigma, isolation, and discrimination from their fellow community members.

*“Because of the 10-year lag between [HIV] infection and death [from an AIDS-related illness], even in a country where HIV prevalence has declined, the numbers of orphans will remain high.”*

~ UNAIDS, UNICEF, and USAID (2002)

Given the nature of how HIV is transmitted, having one parent living with HIV/AIDS means that the other parent may also become infected and die from the disease. Being a double orphan (losing both parents) further damages a child’s support systems. The burden of care for orphaned and affected children often falls on the extended family, which may already have strained resources. In some cases, children may end up living on the streets or in child-headed households, increasing their vulnerability to negative consequences. Improving care and support for PLWHA (e.g., MTCT Plus strategies) will not only enhance their own quality of life but will also reduce the pressures on their children and families. Strategies must also provide assistance to families to help them keep orphaned and affected children in school and to help meet their emotional and nutritional needs.

**Table 3. Projected Total AIDS Orphans by Country in 2010**

	<b>Total number of orphans (0–14) due to AIDS</b>	<b>Orphans due to AIDS as a percentage of total orphans</b>
Cambodia	142,000	28%
Lao PDR	1,000	<1%
Thailand	374,000	36%
Viet Nam	82,000	7%

*Source: UNAIDS, UNICEF, and USAID (2002)*

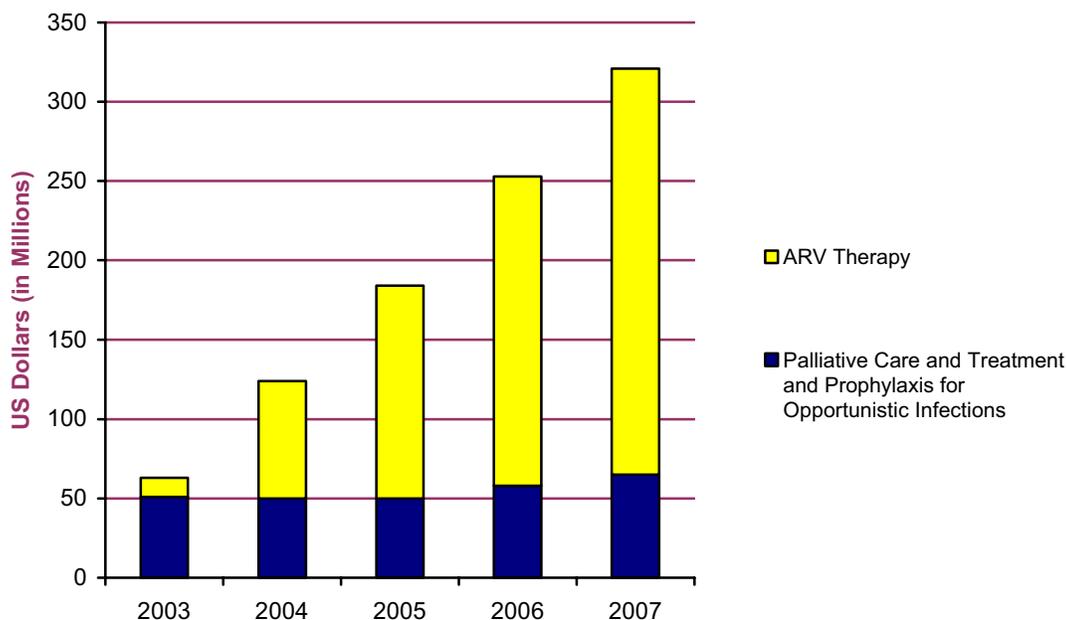
## Health Care Delivery and Costs

The HIV/AIDS pandemic places significant burdens on families, communities, and health care systems. While PLWHA come from all walks of life, those groups that are impoverished or marginalized often are the most vulnerable to HIV infection. These groups are the least likely to have the resources, support systems, or capacities to cope with infection. Families lose wages due to declining productivity – of those living with HIV/AIDS and also those who care for them – and, at the same time, face higher expenses as costs for care and treatment increase. Ideally, comprehensive care for PLWHA should include palliative care for lesser symptoms, prevention and treatment of opportunistic infections (e.g., tuberculosis and pneumocystis pneumonia), ARV therapy, nutritional support, emotional and psychological support, and end of life care. Middle-class families may deplete savings to cover costs of care while families with lower incomes sink deeper into poverty. Unfortunately, particularly where services are limited, people may seek care outside of formal health care sectors (e.g., public, private, community- and home-based health care). For example, they may turn to black market drug sellers who sell medicines at higher prices or who peddle ineffective treatments. In these instances, people do not even receive optimal care considering the amount they have invested.

Health care infrastructures and competencies at all levels in the Mekong Region will need to be improved in order to meet the care and support needs of PLWHA. This will mean addressing deficiencies in both material and human resources. For example, health personnel may need to be trained on the latest techniques to prevent MTCT, to counsel mothers on safe infant feeding practices, and to provide family planning and counseling for HIV-positive women who do not wish to expose any more children to the risk of HIV infection or orphanhood. In particular, health care systems must be equipped to treat opportunistic infections, as well as expand access to ARV therapy. If prevention is to succeed, health care systems must also improve blood screening and safety; provide greater access to voluntary HIV counseling and testing; increase screening and treatment of STIs; develop harm reduction programs to reduce the risk of HIV infection associated with injecting drug use; build referral networks; strengthen public health information, education, and communication efforts; and expand and standardize HIV and related behavioral surveillance systems. At the same time, health systems must develop and enforce policies regarding confidentiality, universal precautions, and non-discrimination against PLWHA.

A recent study by UNAIDS estimated the costs of scaling up prevention and care programs in low- and middle-income countries. That study estimated that for the four countries in the lower Mekong Region, the costs of palliative care, treatment of opportunistic infections (e.g., tuberculosis), and prophylaxis for opportunistic infections for all who need it would be about \$60 million per year (see Figure 8). The cost of providing ARV therapy to all PLWHA who need it and have access to adequate health facilities would rise to about \$250 million by 2007.

**Figure 8. Estimated Costs for Care and Treatment of PLWHA in the Mekong Region, 2003-2007**



*Source: "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years." Presented to the UNAIDS Programme Coordinating Board, Lisbon, Portugal, December 11-12, 2002.*

Meeting the care and support needs of PLWHA will require improvements not only in formal health institutions but will also necessitate the active involvement of community-based organizations. Thailand's HIV/AIDS response has been successful due, in part, to multisectoral collaboration across the government (at both the national and local levels), NGOs, and civil society. Other countries, such as Viet Nam and Lao PDR, are only beginning to see the emergence of government-civil society partnerships.

## Implications for Development

The challenge of HIV/AIDS cannot be addressed if it is treated narrowly as a public health or medical issue alone. The impacts of HIV/AIDS are felt at all levels – family, community, country, and region – and across all sectors – business, education, agriculture, and labor, among others. Some of the HIV/AIDS-related development issues facing the Mekong Region include:

- **Resource allocation for HIV/AIDS programs.** Thailand has the most developed economy in the region and is most able to contribute its own resources to the fight against HIV/AIDS. A decline in the national adult HIV prevalence in Thailand has been credited to the country's targeted response, which was supported by political commitment and mobilization of resources. Following the economic crisis that hit Asia in 1997, however, resources for HIV/AIDS in Thailand were drastically affected. Countries in the region must maintain and increase resource allocations if recent declines in prevalence are to be assured or sustained into the future. In addition, countries – such as Burma, Cambodia, Lao PDR, and Viet Nam – that are dependent on external technical and financial resources or have other competing development priorities (e.g., improving the educational system or combating poverty) will require assistance in building in-country capacity to address the pandemic.
- **Labor supply, productivity, and educational investment.** The majority of HIV infections and AIDS cases in the region are found among adults (15–49) who, as a group, are the most productive segment of the workforce. HIV/AIDS will contribute to a loss of workers among this group and, subsequently, may affect productivity in industrial, agricultural, and other sectors. With the loss of workers also comes the loss of investment that went into their training and education. Business costs will increase due to labor replacement, recruitment, and the need for new training. A decline in agricultural productivity will adversely affect the predominantly agrarian societies in the region – including negative consequences for national economic output, household income, and the overall health and nutrition of the population.
- **Workplace policies and programs.** The world of work is not only affected by HIV/AIDS, it represents an important mechanism for implementing prevention, care, and support programs, and it must be involved in all efforts to reduce stigma and discrimination against PLWHA. Policies are needed across the employment sector that address the workplace rights of PLWHA. To that end, the International Labor Organization (ILO) has developed *An ILO Code of Practice on HIV/AIDS and the World of Work* (2001) that provides guidance on key principles, rights and responsibilities, and various aspects of HIV/AIDS programs, including prevention, care and support, training, and issues surrounding screening and testing.
- **Socioeconomic factors that affect vulnerability.** Socioeconomic factors have a complex relationship with vulnerability to HIV infection. As noted in Section 1, economic growth and development have not been balanced across the Mekong Region or within countries. The proportion of people living below the poverty line ranges from nearly one-fifth in Thailand to about one-half in Viet Nam (World Bank, 2000). Poor economic circumstances increase vulnerability for HIV infection. In turn, loss of loved ones and resources due to illness and death caused by AIDS traps families in a cycle of increasing poverty and vulnerability. At the same time, the economies of some countries (e.g., Lao PDR and Viet Nam) are in transition and many areas are experiencing rapid urbanization. These transitions may dismantle traditional support networks and systems before establishing new ones. Successful economic ventures, for example the tourism industry in Thailand, may bring with them a host of other factors that impact the uptake of high-risk behaviors (e.g., the establishment of sex industries that cater to tourists). In addition, people seeking improved economic opportunities, such as those migrating from Burma to neighboring Thailand and China, may also find themselves in new situations or settings that increase their risk for HIV infection.

## Cross-border Issues

Economic changes (both positive and negative), transportation links, periods of instability and war, and greater cooperation among countries have all contributed to increased mobility, and, subsequently, the spread of HIV in the Mekong Region. Each country in the region is home to mobile populations, who travel either within or outside of the country for temporary or extended periods of time. Mobile populations include seasonal agricultural workers, fishermen, truck drivers, construction workers, uniformed personnel, refugees or displaced groups, sex workers, businesspersons, tourists, and others.

Several factors contribute to the HIV vulnerability of mobile populations. Border areas and trade and travel routes have become sites of entertainment and sex industries that serve mobile populations. Separation from families, coupled with disposable income, may increase the likelihood that persons from these groups will engage in high-risk behaviors, such as unprotected sex or injecting drug use. Many people who migrate do so because of economic hardship or political instability. Already disadvantaged, they may turn to occupations (e.g., sex work) that increase risk for HIV infection. Many mobile individuals will also face language or cultural barriers in their new destinations that limit access to information and other needed support services. In addition, if HIV prevention efforts target only selected mobile populations, such as truck drivers and migrant laborers, other groups – such as military personnel, businesspersons, and tourists – may downplay or deny their own risk for HIV infection.

Given that the HIV/AIDS pandemic is not confined to any one nation's boundaries, regional collaboration is needed to develop effective strategies to address it. Some of the related priority action areas for regional initiatives include slowing the drug trade, preventing human trafficking, incorporating HIV/AIDS prevention activities into transportation and construction projects, and developing culturally appropriate HIV/AIDS programs for mobile populations across countries. These efforts must include partners from governments and civil society. Strategies should also build on the strengths of community-based outreach programs that have success in meeting the needs of hard-to-reach groups, such as IDUs or sex workers not working in brothels.

Mobility and migration also link Cambodia, Lao PDR, Thailand, and Viet Nam with their neighbors in the Greater Mekong Region – China and Burma. HIV prevalence in China is low though its large population size masks higher levels of infection among groups that practice high-risk behaviors. In particular, Yunnan Province, which shares borders with Burma, Lao PDR, and Viet Nam, has been hit hard by HIV/AIDS. Burma – along with Cambodia, Papua New Guinea, Thailand, and certain states in India – is the only other country in the Asia and Pacific Region to be experiencing a more generalized epidemic. Injecting drug use and, to some extent, the sex industry have fueled the spread of HIV in both China and Burma.

### Key Partners in Addressing Cross-border HIV/AIDS Issues

- Ministries (e.g., health, women, tourism, and defense and uniformed personnel) and other government entities (e.g., parliamentarians)
- Relevant provincial departments
- Regional organizations (e.g., Association of Southeast Asian Nations)
- Community-based outreach programs and NGOs, including PLWHA networks and members of mobile groups
- Local businesses and industries
- International donor community

## HIV/AIDS and Tuberculosis

As countries in the Mekong Region try to mitigate the impacts of the HIV/AIDS pandemic, they must also contend with the opportunistic infections that affect those who have developed AIDS. Tuberculosis is the most common opportunistic infection found among PLWHA, and it is also a leading cause of death for PLWHA. Even without HIV/AIDS, the region is a hot spot for the global tuberculosis crisis. Worldwide, Burma (#19), Cambodia (#18), China (#2), Thailand (#16), and Viet Nam (#13) rank among the top 20 countries in terms of total tuberculosis cases. Estimated incidence of tuberculosis is particularly high in Cambodia (585 cases/100,000 population) when compared with its neighbors, Viet Nam (179/100,000) and Thailand (135/100,000) (WHO, 2003).

The interaction between HIV and tuberculosis could have serious consequences for public health in the Mekong Region. Many adults in the region have latent tuberculosis infections that are normally suppressed by their immune systems. HIV infection, however, weakens the immune system and significantly increases the likelihood that tuberculosis infection will develop into overt tuberculosis. HIV/AIDS, therefore, is increasing the total number of tuberculosis cases, as well as the opportunities for tuberculosis – which is transmitted by bacilli through the air – to spread to others.

In the absence of HIV/AIDS, the number of new tuberculosis cases in the region would have been about 260,000 in 2000, based on case rates in prior years. However, estimates indicate that HIV/AIDS caused almost 40,000 additional new tuberculosis cases in 2000. Projections using SPECTRUM suggest that HIV/AIDS will continue to add about 40,000 additional new tuberculosis cases each year until 2010. If we assume that among people with both HIV/AIDS and latent tuberculosis infections, 8 percent develop tuberculosis each year, then the additional number of cases attributed to HIV/AIDS would be over 400,000 in the decade from 2000–2010. This is likely to be a conservative estimate given the potential for the emergence of drug-resistant strains of tuberculosis and the increased opportunities of transmission of tuberculosis due to the additional number of cases.

WHO recommends the direct observation treatment strategy (DOTS) to cure tuberculosis cases (WHO, 2002a). DOTS involves government commitment, improved case detection, standardized treatment that is directly observed for at least the first two months, a regular supply of essential drugs, and assessment of treatment results. Thailand, with a well-developed health care infrastructure, and Viet Nam, building on a network of commune health centers, have made progress in providing widespread access to DOTS (WHO, 2002b). Cambodia introduced DOTS in 1994 and continues to work to strengthen its health care system.

Tuberculosis programs throughout the region will have to adapt to the evolving HIV/AIDS situation, which not only increases the number of tuberculosis cases but – given weakened immune systems – may also have an impact on the effectiveness of treatment strategies. Public health officials must also address the issue of population mobility and how it impacts health care and treatment regimes. Regional collaboration is needed to ensure that people who start treatment in one area or country have access to the necessary support and services to sustain their treatment in the new destination. On an optimistic note, progress made toward strengthening capacity to detect and treat tuberculosis can lay the groundwork for national and provincial programs to provide improved HIV/AIDS care and treatment.

## ◆ Summary Points ◆

- ✓ New HIV infections are increasingly being found among **women**, reflecting the maturity of the pandemic in the Mekong Region. Women often bear the responsibility for care of those living with HIV/AIDS. They are also less likely to have access to information regarding HIV/AIDS or care and treatment for their own health needs.
- ✓ The number of **children affected or orphaned by HIV/AIDS** will continue to rise across the Mekong Region, even as trends in adult HIV prevalence have declined in some countries in recent years. These children are often forced to leave school to care for loved ones or contribute to household income. Lack of economic and educational opportunities increases their vulnerability to HIV infection, malnutrition, and exploitation.
- ✓ As more people with HIV infection develop AIDS, **health care needs and costs** will increase at the family, community, and societal levels. Middle-class families may deplete savings to cover costs while families with lower incomes sink deeper into poverty. Health care infrastructures and competencies at all levels in the Mekong Region will need to be improved in order to meet the care and support needs of PLWHA.
- ✓ HIV/AIDS affects a country's **socioeconomic development** in a number of ways. It can diminish labor supplies and productivity – having a negative impact on national economic output, household income, and the overall health of the population. Countries must find ways to strengthen resource mobilization for HIV/AIDS programs while meeting other development needs.
- ✓ The HIV/AIDS pandemic is not limited by national boundaries. Mobility across the Mekong Region and its neighboring countries necessitates **cross-border cooperation**. Possible priority issues for collaboration include slowing the drug trade, reducing human trafficking, incorporating HIV/AIDS prevention efforts into transportation and construction projects, and developing culturally appropriate programs for mobile populations.
- ✓ The progression of HIV infection to the development of AIDS will also increase the number of opportunistic infections in the Mekong Region. **Tuberculosis** is the most common opportunistic infection that affects PLWHA. Even without HIV/AIDS, the Mekong Region is one of the hot spots for the global tuberculosis crisis. HIV/AIDS will increase the number of new tuberculosis cases well into the next decade.

◆ Section Four ◆

# MOVING FORWARD

This section outlines principles and strategies that are integral to the implementation of comprehensive, effective HIV/AIDS programs – including an enabling environment and prevention, care, and mitigation efforts. It also highlights some of the promising programs already under way in the Mekong Region.

*“There is a compelling need to chalk out well-designed and effective strategies that will halt the spread of HIV and reduce the impacts of the epidemic in the [Southeast Asia] region. The challenges that face us are enormous. To address these, a more holistic approach to HIV/AIDS prevention and care is called for.”*

~ H. Larson and J.P. Narain, WHO, 2001

## An Enabling Environment

The success of HIV/AIDS prevention, care and support, and mitigation programs depends, in part, on the creation of an enabling environment. An enabling environment facilitates behavior change to reduce HIV transmission and promotes the quality of life for PLWHA and their families. In a supportive environment, people are not afraid to seek the information or treatment that they may need. Strategies to build an enabling environment include:

- ***Strengthening policy responses and political commitment.*** Policies articulate values and priorities, outline frameworks and objectives, and provide for the human and material resources needed to carry out projects. Ranging from national strategy documents to local-level service delivery guidelines, policies provide the foundation on which to build effective HIV/AIDS programs. Commitment to address HIV/AIDS from all levels of the government and active civil society participation in policy advocacy and formulation are necessary components of strong policy responses. Cambodia, Lao PDR, Thailand, and Viet Nam have each developed national HIV/AIDS strategic plans and are working to strengthen provincial programs and plans.
- ***Promoting human rights.*** Perhaps more than any other health issue, HIV/AIDS raises human rights concerns. Some of these issues include confidentiality of HIV status, equal access to health and other services, mandatory testing, the right to HIV prevention information and methods, discrimination in employment practices, child sexual exploitation, violence against women or GBV, and deportation of legal and illegal immigrants or travel restrictions on the basis of HIV status. The United Nations General Assembly Special Session’s (UNGASS) Declaration of Commitment on HIV/AIDS states that “realization of human rights and fundamental freedoms for all is essential to reduce vulnerability to HIV/AIDS” and “respect for the rights of people living with HIV/AIDS drives an effective response.” Countries in the Mekong Region must ensure that commitment and active support for these and other human rights principles guide each aspect of their HIV/AIDS programs. In addition, promoting human rights refers not only to the rights of PLWHA, but also the empowerment of marginalized or vulnerable groups, such as women, youth, MSM, sex workers, IDUs, and others.
- ***Reducing stigma and discrimination.*** Stigma hinders all efforts to prevent HIV, improve care and support, and mitigate the impacts of the pandemic. When people fear rejection from families, communities, co-workers, health care providers, and others, they will not seek counseling, testing, or care services. And stigma is not limited only to those living with HIV/AIDS – it extends to families of PLWHA, members of groups that practice socially unacceptable high-risk behaviors, and those who assist PLWHA. For example, Cambodian Buddhist monks who are leading responses to HIV/AIDS at the community level have had to overcome both the fear and actual experience of stigmatization when they try to help PLWHA. Discrimination, often referred to as “enacted stigma,” can deny PLWHA and their families from having equal access to housing, employment, education, health care, and more. Strong policy responses, political commitment, advocacy, public awareness campaigns, empowerment of PLWHA, and multisectoral approaches should be used to confront stigma and discrimination.
- ***Empowering PLWHA.*** PLWHA must be at the center of responses to the HIV/AIDS pandemic in the Mekong Region. The GIPA Principle calls for the meaningful participation of PLWHA in policymaking, program design and implementation, community mobilization, and evaluation. PLWHA and their families are often the most effective advocates for behavior change, and they intimately know about the factors that make people vulnerable to HIV and about the services that are needed to improve care and support. Promoting GIPA lends relevance and credibility to

interventions, greatly improving programs, but also builds the confidence and skills of PLWHA – a necessary aspect of empowering those affected by HIV/AIDS.

- ***Encouraging multisectoral collaboration and involvement of civil society and other partners.*** HIV/AIDS must not be addressed as a public health or medical issue alone. The previous discussions have highlighted how HIV/AIDS impacts all sectors – such as business, education, the economy, and cross-border issues – and affects all layers of society, from the individual to global level. Multisectoral collaboration that builds partnerships between the government and civil society organizations improves responsiveness of HIV/AIDS programs, encourages resource and information sharing, promotes community ownership of and commitment to programs, and facilitates long-term sustainability. Community- and faith-based organizations, PLWHA networks, women’s and youth groups, businesses, unions, professional societies, schools, and others all have important roles in the fight against HIV/AIDS. Particularly in Thailand, widespread civil society involvement has enhanced the development and implementation of HIV/AIDS policies and programs. The Global Fund to Fight AIDS, Tuberculosis and Malaria is another example of efforts that have encouraged participation from a number of sectors, including government, NGOs, PLWHA, and other civil society groups.
- ***Developing human and institutional capacity.*** Enhancing individual and institutional capacity to address HIV/AIDS will often require developing new skills and capabilities. PLWHA may need help in building advocacy skills; health care providers may need training in non-stigmatizing practices and the latest medical advances; governments may require assistance in collecting and analyzing data to inform decision-making processes; and businesses may need help developing workplace HIV/AIDS policies and programs. Governments and civil society organizations must actively promote opportunities to develop the in-country and regional capacities needed to address the HIV/AIDS pandemic.
- ***Improving resource allocation.*** Mounting an effective response to the pandemic will require the provision of additional financial resources across the region. Estimates prepared for UNGASS in 2001 indicate that Cambodia, Lao PDR, Thailand, and Viet Nam will need to spend \$300 million annually by 2005 to meet prevention and care goals (Schwartlander, et al., 2001). Devoting increased resources to HIV/AIDS programs is a good long-term investment for countries in the Mekong Region. For example, improved care and support programs and voluntary counseling and testing facilities can help encourage people to learn their HIV status, seek treatment, and adopt behaviors to prevent transmission – thereby improving prevention and reducing the future burden of care. As another example, strategies to build capacity of local as well as district health care institutions to diagnose and treat opportunistic infections, such as tuberculosis and pneumonia, and STIs will benefit a range of patients, not just those living with HIV/AIDS. Countries that lack internal resources must work to increase regional collaboration and to take advantage of international resources, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria. As discussed earlier, countries must also ensure that strategic planning processes, multisectoral collaboration, and capacity development are nurtured so that increased resources are used wisely.
- ***Gathering, analyzing, and disseminating accurate information to enhance decision making and public awareness.*** Up-to-date, accurate information is a valuable tool for breaking the silence that often surrounds HIV/AIDS in the Mekong Region. Information sharing could include public awareness campaigns; research, monitoring, and surveillance; economic, epidemiological, and other relevant data for strategic planning purposes; age-appropriate sexuality and life skills education; sharing of best practices; and referral networks for prevention and care services. Community-based advocacy activities, work- and school-based prevention programs, peer outreach efforts, and

sensitization training for journalists, health care professionals, and other community leaders are strategies that can be used to spread accurate, non-stigmatizing information about HIV/AIDS. Governments must continue to work to develop research, monitoring, and surveillance guidelines and capabilities as well as the capacity to collect, analyze, disseminate, and use data to inform decision making. In addition, civil society organizations should play an active role in studying the socioeconomic factors that contribute to vulnerability to HIV, particularly for marginalized or hard-to-reach populations.

## **Continuum of Care: The Example of Voluntary Counseling and Testing**

The importance of designing and implementing HIV/AIDS responses to address each aspect of the pandemic – including prevention, care, and mitigation efforts – cannot be stressed enough. HIV/AIDS presents several interlocking challenges and each one must be tackled hand-in-hand with the others. The “continuum of care” is a concept that recognizes that using a “prevention vs. care” dichotomy or focusing heavily on one activity over another impedes meaningful progress toward the achievement of all prevention, care, and mitigation goals.

The example of voluntary HIV counseling and testing demonstrates how prevention and care are intrinsically linked. Access to voluntary counseling and testing services remains extremely limited outside of the most developed, urban areas of the Mekong Region yet improving access is a necessary component of all prevention and care efforts. In terms of prevention, the fact that most people who have contracted HIV do not know about their status is a major factor leading to the further spread of the virus. For those who are found to be HIV positive, counseling can encourage behavior changes and provide information on how to prevent transmission. Those who are not infected can also receive information on safer sex practices and other ways to protect themselves in the future. Prevention improves care and support by easing the future strain on already limited resources and services.

However, people will not go for counseling and testing if they fear stigma and discrimination or if they do not have access to affordable, high quality care and treatment. In such a situation, they may not see any benefits to learning their HIV status. Post-testing services, such as referral networks for treatment and emotional support, are essential for encouraging the use of voluntary counseling and testing services. Following testing, people who are found to be HIV positive can be counseled on ways to prevent transmission to others and to maintain their own health as well as gain access to treatment. Voluntary counseling and testing not only promotes prevention, it also serves as an entry point for the care and support of PLWHA.

The success of prevention efforts, then, is dependent on the success of care and mitigation efforts, and vice versa.

## Prevention

Currently, there is no cure for AIDS and vaccines and microbicides to prevent HIV transmission are still in the developmental stages. Success in slowing the spread of the virus depends on changing the behaviors and addressing the socioeconomic factors that put people at risk for HIV. Improved access to voluntary HIV counseling and testing has already been noted as a critical aspect of both prevention and care efforts. Other key elements of prevention programs are discussed below.

- ***Sexual transmission.*** Due to a number of factors – including lack of information, lack of resources, unequal power dynamics within relationships, and low self-esteem and self-efficacy – sexual behaviors are among the hardest behaviors to change. Even when people are knowledgeable about AIDS and how HIV transmission is prevented, sexual behavior is slow to change. In part, this may be due to a low perception of individual risk, fatalistic attitudes, denial, the need to self-affirm through sexual performance, or the use of alcohol or drugs, which can impair judgment. In many cases, however, we do not deeply understand the reasons why people do not practice safer sex. Developing effective, culturally appropriate strategies to reduce the sexual transmission of HIV is one of the most pressing and complex issues facing policymakers and program planners in the Mekong Region and requires in-depth research and action.

To prevent the spread of HIV through sexual contact, interventions must seek to encourage abstinence and fidelity; increase condom use (e.g., male and female condoms) among those who are sexually active; reduce the number of sexual partners; diagnose and treat STIs; and delay the onset of sexual activities among adolescents, especially girls. To date, much of the emphasis of condom promotion efforts in the Mekong Region has been on direct sex workers. While this may be a pragmatic approach for dealing with the sexual transmission of HIV, countries must continue to work to find ways that empower people who may be placed in high-risk situations and they must also develop strategies to address other modes of sexual transmission (e.g., from clients of sex workers to their wives, and among indirect sex workers and their clients). Community-, work-, and school-based programs must play an active role in prevention activities. In particular, programs should be developed that help youth make healthy decisions regarding sexual behavior – before they start having sex – and also improve their educational and economic opportunities.

- ***Injecting drug use.*** Programs to reduce injecting drug use in the Mekong Region have often focused on eliminating the supply of illicit drugs, enforcing criminal punishments against IDUs, and conducting public awareness campaigns highlighting the dangers of drug use. To address the practical realities of injecting drug use and risk for HIV transmission, however, strategies should also include well-supported drug treatment programs; consistent harm reduction programs; drug therapy with methadone; life skills training; and ongoing counseling and support to prevent and manage relapses. In addition, behavior change strategies for IDUs must use a holistic approach that deals not only with drug use, but other high-risk behaviors, such as unprotected sex. Social, political, and economic factors within the country will influence the extent to which different interventions can be implemented effectively to reduce risk for HIV infection. Greater collaboration between drug control and HIV prevention programs is also needed across the region.

Harm reduction programs – such as reliable needle and syringe distribution schemes – can help reduce the transmission of HIV among IDUs who might otherwise rely on contaminated needles. When establishing programs, countries must ensure proper disposal of needles, maintain consistent and adequate supplies, and offer referral services and counseling since the needle exchange can be the first point of contact between IDUs and health care providers. In addition, strategies that encourage peer outreach and actively involve IDUs will often be better able than formal health care services to reach marginalized populations. Support services should promote the reintegration of IDUs into

mainstream society, working to build their educational and economic opportunities and break the cycle of dependence on drugs. Finally, countries must strive to strike a balance between strong measures to discourage drug use (e.g., criminal sanctions) and a safe, supportive environment for IDUs to come forward to receive counseling and treatment.

- ***Mother-to-child transmission.*** Preventing MTCT involves several interrelated strategies, including reducing the vulnerability of women to HIV; improving and encouraging pre- and post-conception voluntary HIV counseling and testing for all women; expanding family planning counseling and services to reduce unwanted pregnancies among HIV-positive women; providing appropriate ARV regimens for HIV-positive mothers and their infants during pregnancy, delivery, and the postpartum period; supporting mothers with regard to safe infant feeding practices; and enhancing services to provide ongoing support for mothers, infants, and children affected by HIV/AIDS. A comprehensive MTCT Plus package would promote support services for the mother and her affected family members, including treatment for opportunistic infections, psychosocial counseling, and ARV therapy. Beyond recognizing the human rights of mothers living with HIV/AIDS, MTCT Plus strategies are also increasingly being seen as essential to reducing the number of orphans as well as ensuring the long-term stability of families.

Research on prevention of MTCT is constantly leading to new discoveries, and policy and program planners must keep informed of these breakthroughs as they seek to develop appropriate services and guidelines. For example, research suggests that a single dose of nevirapine given to the mother at delivery and to the infant within 72 hours of birth can significantly reduce the chance of HIV transmission (Jackson and Fleming, 1999). This approach is more cost-effective and easier to implement than short courses of other ARV therapies. Additionally, some studies suggest that exclusive breastfeeding and early weaning provides greater protection against HIV transmission than mixed breast milk/replacement formula feeding.

- ***Blood safety.*** Countries such as Cambodia, China, and Viet Nam have reported cases of HIV transmission through transfusions using infected blood and blood products. In order to ensure a safe blood supply, UNAIDS recommends establishing a national blood transfusion service that has its own budget and staff but is also accountable to the government or a government-appointed NGO; recruiting voluntary, nonpaid donors who are at low-risk for HIV and other infections; screening all donated blood; and using donated blood in an appropriate and rational manner (UNAIDS, 1997). Countries must develop guidelines and training programs to address issues such as blood collection and screening, confidentiality, and proper storage. UNAIDS also recommends promoting and providing access to blood substitutes, where appropriate, and working to prevent anemia and other causes of blood loss. For example, improving nutrition and controlling malaria in children can help alleviate chronic anemia, which is treated through repeated blood transfusions. In addition, promoting safe, hygienic medical procedures and universal precautions can help reduce HIV transmission through contaminated blood.

One critical element of maintaining a safe blood supply is to have a strong system of voluntary, nonpaid blood donation. Systems that rely on paid donation have traditionally attracted donors who are more likely to have HIV or other infections. At the same time, public health officials must work to build confidence in the system itself – people will not volunteer to donate blood if they fear that the collection procedures for donating blood are not safe and may lead to HIV infection. There are also informal sectors outside the public health structure that provide paid blood donation services and the government should work to educate the public about the potential dangers associated with receiving blood donations from non-formal health care providers. WHO's Western Pacific Regional Office is establishing a training center for public health officials in the region to build capacity to develop and enforce quality assurance standards for collecting and screening blood supplies.

## Care and Support

Providing ARV therapy is a key component of care and support for PLWHA, and some estimates suggest that less than 5 percent of people needing ARVs currently use the treatments (UNAIDS, WHO, and Ministry of Foreign Affairs/France, 2002). In particular, highly-active antiretroviral therapy (HAART)<sup>5</sup> has been shown to prolong life and delay progression from HIV infection to AIDS. Some of the important issues surrounding ARV therapy include cost, access, ensuring consistent supply and delivery, intellectual property rights regarding drug patents, complexity of use and adherence to treatment regimens, and the emergence of drug-resistant strains of HIV.

Costs for ARV therapy and associated laboratory monitoring have declined over the past decade. In addition, countries from the developing world are increasingly devising strategies to address the need for improved access to ARVs. For example, countries such as Brazil and Thailand have invoked the “national emergency” clause in intellectual property rights agreements and this has allowed them to manufacture generic brands of ARVs, thus reducing cost. Brazil goes even further by distributing free ARVs to those who need them, which has been instrumental in dramatically reducing the country’s AIDS mortality rates. Both Brazil and Thailand are providing technical assistance to developing countries that are exploring adopting similar strategies. International mechanisms, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, and pressure from activist movements, such as Health GAP (Global Access Project) and the Global Treatment Access Campaign, are also increasing the resources mobilized and allocated for improved access to ARVs.

At the same time, comprehensive care goes beyond simply providing access to ARV therapy. Figure 9 provides an overview of the types of services that should be included in comprehensive care and support programs for PLWHA and their families. Some of these services include MTCT Plus programs; prevention and management of opportunistic infections; palliative care; capacity development; workplace programs; information, education, and communication activities; voluntary counseling and testing; legal services; psychosocial support; nutrition counseling and support; ARV therapy; and support relating to end-of-life issues.

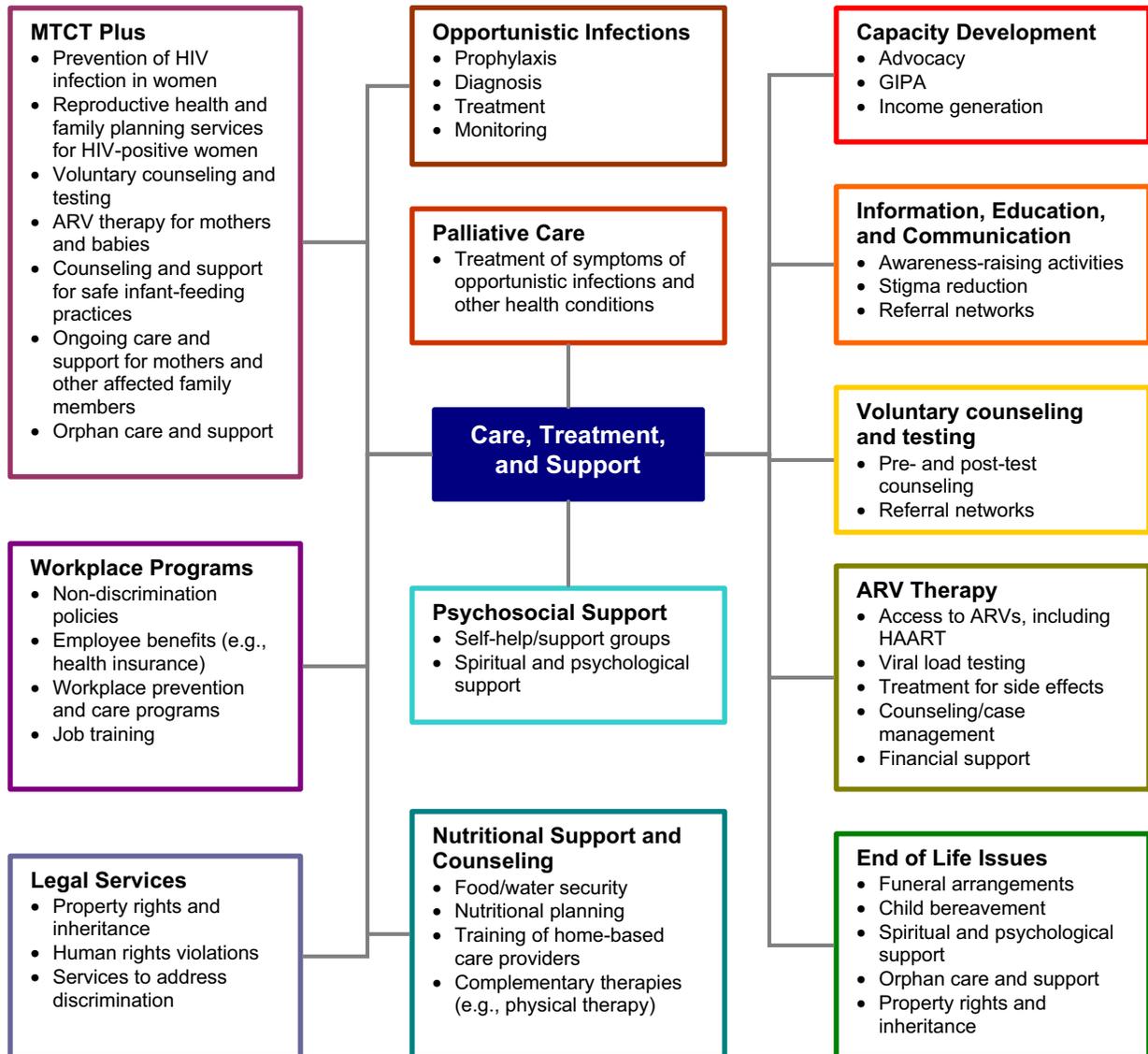
It should also be kept in mind that reducing stigma and discrimination is essential for the success of each and every type of service. In addition, providing comprehensive care and support should involve a range of sectors – public health officials, home-based or community-based care providers, faith-based groups, businesses, and others – and each will need additional training and resources to respond to care needs.

*“A real opportunity to alter the course of the HIV/AIDS epidemic now exists to the extent that it is recognized that care, treatment and prevention of HIV/AIDS are strongly linked ... Failure to seize this opportunity to expand access to care and antiretroviral treatment will perpetuate untold human suffering and increase poverty and inequity on a worldwide scale. ”*

~ UNAIDS, WHO, and  
Ministry of Foreign Affairs (France) (2002)

<sup>5</sup> HAART consists of three or more drugs, including one protease inhibitor.

**Figure 9. Components of Comprehensive Care and Support Programs for PLWHA**



## Mitigation

While there are no easy answers for how to prevent HIV or care for PLWHA, mitigating the associated impacts of the pandemic is perhaps the most complex challenge facing countries in the Mekong Region. Mitigation refers to alleviating the hardships and impacts that are associated with HIV/AIDS at the individual, family, community, national, and regional levels. The previous section discussed some of the interventions that are needed to mitigate the impacts of HIV/AIDS at the individual level, including ARV therapy, palliative care, and economic and nutritional support. Families also need various types of assistance, such as income-generation activities as family wages decrease and health expenses increase; support to keep children affected by HIV/AIDS in school and to help them deal with emotional loss; and legal assistance to ensure inheritance and property rights when a family member dies of HIV/AIDS. The survival of families is threatened further when they must sell off their land to pay for health care, as is happening in Cambodia and Thailand.

As noted earlier, ideally, countries should embrace a multisectoral approach to the HIV/AIDS pandemic – one that involves all government sectors and levels (e.g., national, provincial, local) as well as community- and faith-based organizations, PLWHA networks, women’s and youth groups, businesses, universities and research institutions, and health care providers, among others. Community- and home-based care is essential in the Mekong Region, especially in resource-constrained areas that suffer from lack of health care facilities and trained personnel, as well as limited access to ARV therapies. Community- and faith-based organizations have made significant contributions to the alleviation of the social needs that are exacerbated by the pandemic. They are often the most stable, trusted, and respected social service institutions operating at the grassroots level. Their role within the community enables them to promote social norms that can break the silence surrounding HIV/AIDS, encourage attitudes and behaviors to slow the spread of HIV, and facilitate care and support for PLWHA and their families.

At the national level, governments can make a number of contributions to mitigation efforts. Governments should conduct multisectoral strategic planning exercises that encourage widespread participation and use accurate, up-to-date information about the pandemic. Ensuring high quality educational opportunities, healthy workers, strong families, and sustainable support services should be priorities at both the community and national levels. Protection and promotion of human rights are also important aspects of a national response. In addition to strong political commitment, governments should help in providing for the human, technical, and financial resources to implement high quality prevention, care, support, and research initiatives across sectors. At a regional level, countries should strengthen collaborative partnerships to address common concerns and share resources and lessons learned on topics such as the drug trade and human trafficking.

Mitigation of HIV/AIDS requires not only dealing with the direct consequences of the disease, such as loss of family resources and decreased labor productivity, but also implies the need to address the factors that make people vulnerable to HIV/AIDS in the first place. Cambodia’s experience illustrates the interrelationship between the contributing factors and impacts of the pandemic and the need to address both issues together. Years of civil war, political instability, and genocide depleted the country’s human resources, resulting in the loss of some of its most educated people – health personnel, teachers, business leaders, and other skilled professionals. Diminished economic, educational, and health care systems increase the population’s vulnerability to HIV and at the same time decrease the country’s ability to respond to the crisis. However, improving economic and educational opportunities and strengthening the capacity of health personnel and institutions can both reduce vulnerability to HIV and enhance the country’s ability to cope with HIV/AIDS.

## Promising Practices from the Mekong Region

Governments, NGOs, civil society groups, businesses, international donor organizations, and others have already begun to develop and implement innovative strategies to respond to the HIV/AIDS pandemic in the Mekong Region. Selected strategies are highlighted below.

- ***Meaningful involvement of PLWHA.*** In collaboration with the Khmer HIV/AIDS NGO Alliance, the POLICY Project has supported the establishment of the Cambodian Positive Network (CPN+), the country's first national network of PLWHA associations. The mission of CPN+ is to empower Cambodian PLWHA to participate in the broader policy dialogue and advocacy process. POLICY provides CPN+ with an intensive mentoring and technical assistance program focused on capacity development and institutional strengthening of network members. In Thailand, employees of the Thai Red Cross who are living with HIV/AIDS have helped to set up and manage a care and support clinic called the Wednesday Friends Club. The club offers a referral network for accessing ARV treatment and club members serve as caregivers for each other when needed. Through this process, PLWHA not only receive help meeting their own care needs but also build their self-esteem and capacity by helping others.
- ***Youth-friendly services.*** Youth need services that address their particular health-related concerns and behaviors, as well as reduce their vulnerability to HIV through improved educational and economic opportunities. The Lao Youth HIV/AIDS Project is a collaboration between the Macfarlane Burnet Institute for Medical Research and Public Health (Burnet Institute) and the Lao People's Revolutionary Youth Union. A key component of the project is to raise awareness of the factors affecting young people's vulnerability to HIV infection by supporting and disseminating analyses conducted by the youth themselves. The Mekong Partnership and Beyond is a project of UNICEF and partners in Burma, Cambodia, China, Lao PDR, Papua New Guinea, Thailand, and Viet Nam. It seeks to reduce the impact of the pandemic on children, youth, and families. Examples of the partnership's work in Viet Nam are its support to peer outreach teams comprising young people living with HIV/AIDS and expansion of a program with the Viet Nam Red Cross that provides life skills training to out-of-school youth.
- ***Harm reduction and injecting drug use.*** Harm reduction strategies have yet to be adopted on a wide scale in the Mekong Region. The Asian Harm Reduction Network (AHRN), headquartered in Thailand, promotes strategies to reduce the physical and social harms associated with drug use through advocacy, networking, information sharing, and policy and program development. AHRN provides training and technical assistance as well as encourages communication among individuals, organizations, and countries across Asia. In Viet Nam, harm reduction projects have been periodically pilot-tested in areas highly affected by injecting drug use, though these projects often suffer from isolation and lack of resources and support. The country's National AIDS Standing Bureau is working with the Burnet Institute and AusAID on a project to build local and central institutional capacity to develop and implement effective, sustainable, culturally appropriate harm reduction strategies for IDUs. An initial situation assessment revealed the importance of establishing a harm reduction network and developing a training program that, in particular, focuses on how to reach youth (Vu, 2001).
- ***Improved educational opportunities for girls.*** In the early 1990s, Thailand's government recognized the need to improve educational opportunities for disadvantaged girls as a means of reducing their vulnerability to exploitation, entry into the sex industry, and HIV infection. Accordingly, the Ministry of Education and a variety of partners developed programs such as the Sema Life Development Project, Thai Women of Tomorrow Project, and Education Loan Fund Project

(UNAIDS, 1999). While primary education up to Grade 6 is compulsory in Thailand, economic hardship often keeps girls from completing even this minimum level of schooling. The new programs have sought to provide girls from low-income families with the support and resources needed to receive at least nine years of basic education. For those who cannot afford higher education, some programs provide vocational training that prepares girls to enter careers (suited to the local environment and labor market), while others allow them to apply for low-interest loans to continue their educations.

- **Multisectoral approaches.** Multisectoralism involves three primary components: coordination across ministries and sectors (e.g., transport, military, finance, women, education, health, etc.); development of HIV/AIDS plans and programs at all levels (national, provincial, local); and promotion of public-private partnerships and the active involvement of civil society organizations. Cambodia's National AIDS Authority and Lao PDR's National Committee to Control AIDS – both of which include representatives from various ministries – are attempts to encourage multisectoral collaboration in the fight against HIV/AIDS. The establishment of local structures, such as Viet Nam's Provincial AIDS Committees, is increasingly becoming an integral part of the provision of prevention and care services at the community level. Through the Community Action for Preventing HIV/AIDS Project, funded by the Asian Development Bank, Cambodia, Lao PDR, and Viet Nam are working to build the capacity of national and local authorities and NGOs to develop community-based prevention and care programs.
- **Access to treatment.** In 2002, the Yunnan Center for Disease Control's AIDS Program announced plans to partner with the U.S.-based Aaron Diamond AIDS Research Center and GlaxoSmithKline to establish China's largest HIV/AIDS treatment program. The three-year program aims to provide combination ARV therapy and ongoing medical checkups to about 300 PLWHA in Yunnan Province. Program planners hope the program will serve as a model that can be scaled up throughout the country. The provincial government also announced plans to strengthen laboratory facilities and other infrastructure to support the program. In Thailand, funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria will help expand distribution of ARVs to PLWHA as well as scale-up care and treatment for HIV-positive mothers. Cambodia has also been granted funds that will help the country expand care and treatment programs for PLWHA, including access to ARVs.
- **Faith-based leaders and organizations.** Buddhist philosophy, which permeates the societies of the Mekong Region, promotes compassion, patience, hope, and harmony. Building on these principles, several organizations of Buddhist monks have joined the fight against HIV/AIDS. Through the Sangha Metta Project, based in Thailand, Buddhist monks provide counseling and care to PLWHA during home visits. They also train other monks and nuns about HIV/AIDS, help set up support groups, educate villagers about HIV prevention, and care for AIDS orphans. Recognizing the lack of HIV/AIDS programs in other countries, the project has also trained Buddhist monks in Burma and Yunnan Province, China. In Cambodia, Wat Norea Peaceful Children (NPC) is an NGO that was started by monks to provide support to orphans. Since 1998, the monks have also supported AIDS orphans and have worked to reduce the stigma faced by PLWHA. Importantly, NPC facilitated a participatory planning process in 2002 that led to the development of a three-year HIV/AIDS strategic plan for the community and helped confront the silence and stigma surrounding HIV/AIDS. NPC has also conducted sensitization and advocacy training workshops in monk teaching institutions.
- **Research on sex work.** Established in 1997, Coordination of Action Research on AIDS and Mobility in Asia (CARAM-Asia) is a network of South and Southeast Asian organizations and individuals working to address the vulnerability of mobile populations to HIV. Sex workers are among their primary target groups. The network seeks to understand issues from the perspective of sex workers,

improve negotiation and communication skills, and increase access to information and health services. CARAM–Cambodia has spent several years developing a participatory action research approach that involves fostering relationships with sex workers built on trust and exchange of information. The goal of this approach is to place the lives of sex workers in a context that values the sex workers as human beings rather than views them only as “vectors of disease” (Khus, 1999, p. 5).

- **100% Condom Use Programs.** Instituted nationwide in Thailand in 1991, the 100% Condom Use Program sought to encourage consistent condom use in all commercial sex encounters in brothels. Under this program, public health officials conduct awareness-raising activities, the government provides free condoms to sex establishments, sex workers are periodically tested and treated for STIs, and establishments found not complying with the policy are threatened with fines and other sanctions, such as temporary or permanent closure. The program was set up to begin in all local brothels simultaneously and, during its height, messages aimed at men who visit sex workers were broadcast on radio and television for one minute each hour. Many researchers, government representatives, and public health officials credit the program with both behavior changes and declining HIV and STI prevalence levels. The 100% Condom Use Program has served as a model for the region and has been adopted in Cambodia and Burma and pilot-tested on a small scale in Viet Nam. A well-implemented program will respect the human rights, confidentiality, and privacy of sex workers while, at the same time, meet public health needs. It will also encourage the active and meaningful involvement of sex workers in planning, implementation, and monitoring and evaluation of the program. Another concern will be to develop appropriate interventions and services for indirect sex workers, who are often harder to reach because they do not work in formal sex establishments.
- **Regional collaboration.** Policymakers within the Mekong Region have been developing regional initiatives to tackle in-country and inter-country priorities. Key HIV/AIDS-related issues that have emerged and require a regional response include drug use and trafficking, migration and mobility, and child sexual exploitation. Information and resource sharing, combined with collaborative policy development, are strategic approaches that can be used to address regional concerns. Examples of regional initiatives include:
  - In October 2000, the Association of Southeast Asian Nations (ASEAN), which includes all of the countries of the Greater Mekong Region, released a declaration and plan of action aimed at achieving a drug-free ASEAN by 2015. The guidelines advocate for addressing the region’s drug problem through “intersectoral and integrated coordination at national, regional, and international levels.” They also urge implementing public awareness campaigns that highlight the dangers of drug use, sharing best practices on demand reduction, and reducing the supply of illicit drugs.
  - In addition, the ASEAN countries, in November 2001, adopted the 7<sup>th</sup> ASEAN Summit Declaration on HIV/AIDS and signed the four-year ASEAN Work Program on HIV/AIDS (2002–2005). The declaration calls on member states to “strengthen regional mechanisms and increase and optimize the utilization of resources to support joint regional actions” in order to increase access to ARV drugs; reduce vulnerability of mobile populations; expand prevention, care, and treatment services; and promote innovative approaches to mitigate the socioeconomic impacts of the pandemic. With regard to the Work Program, while most of its projects focus on increasing resource allocation for prevention, the program also highlights the need to strengthen treatment, care, and support services.
  - In September 2001, Burma, Cambodia, China, Lao PDR, Thailand, and Viet Nam signed a two-year agreement to implement the Greater Mekong Subregional Joint Action Program to reduce HIV vulnerability among mobile populations. Governments, NGOs, civil society, and local authorities will collaborate on behavior change programs, diagnosis and treatment of STIs, and

condom promotion activities for mobile populations, including fishermen, entertainment facility workers, factory laborers, transport operators, truck drivers, and construction workers.

- Countries participating in the East Asia and Pacific regional meeting of the Second World Congress Against Commercial Sexual Exploitation of Children in October 2001 committed to deadlines for developing legal and social frameworks to protect children who are involved in or may become vulnerable to trafficking, sex work, or pornography. Governments pledged to ensure implementation of the Convention on the Rights of Children and other international principles as well as address the linkages between exploitation of children and drug abuse and the spread of STIs, especially HIV/AIDS.

### ◆ Summary Points ◆

- ✓ An **enabling environment** provides the foundation for effective, sustainable HIV/AIDS programs. Creating an enabling environment involves promoting human rights, empowering PLWHA, reducing stigma and discrimination, and encouraging widespread participation in policy and program development, among other activities.
- ✓ Countries in the Mekong Region must develop policies and programs that address the entire "**continuum of care**" – from prevention of HIV transmission to care and support for PLWHA and their families to mitigation of the impacts of the pandemic.
- ✓ Governments, NGOs, civil society groups, businesses, international donor organizations, and others have already begun to develop and implement **innovative strategies** to respond to the HIV/AIDS pandemic in the Mekong Region.

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