

# The HIV Epidemic in Ho Chi Minh City: Costs of Things to Come

*Resource Implications of the HCMC HIV/AIDS Action Plans*

## Key Findings:

- ◆ The HIV epidemic in HCMC is growing, and current resources are limited. Analyses of the implications of four possible strategies indicate that the most cost-effective intervention would be to allocate resources to all most-at-risk populations simultaneously rather than to single target groups.
- ◆ Current financial resources are inadequate to reverse the growth of the epidemic. HCMC will have an estimated resource gap of VND 168.3 billion (US\$10.6 million) by 2010.
- ◆ Investment in appropriate interventions now will result in substantial savings in the costs of ARV treatment programs in the future.
- ◆ Time is critical. A delay of 12 months in increasing coverage of appropriate interventions will make a significant difference in the number of people who become infected with HIV.

The Analysis and Advocacy (A<sup>2</sup>) Project used two modeling tools. The Asian Epidemic Model (AEM) was used to predict the course of the HIV epidemic in Ho Chi Minh City in the event that risk behaviors remain unchanged from their current levels. The Goals Model links goals, such as those established in Vietnam's National Strategy on HIV/AIDS Prevention and Control, to the resources needed to achieve those goals. By linking analyses from these two models, A<sup>2</sup> can accurately predict the future course of the epidemic, depending on how resources are allocated.

This Research Highlight presents projections from the Analysis and Advocacy (A<sup>2</sup>) Project on the likely course of the epidemic and the cost-effectiveness and implications of four intervention scenarios. There is clearly a substantial risk of continued growth in HIV in Ho Chi Minh City. It is hoped that the analyses and recommendations presented in this brief will be reflected in the decisionmaking priorities and resource allocations of the HCMC HIV/AIDS strategy and action plans.

## What are the options?

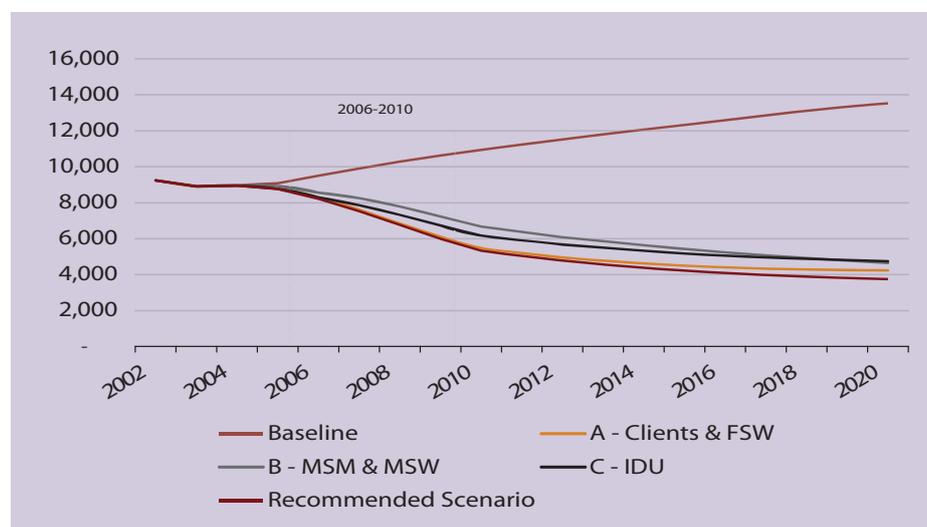
Decisions regarding prevention and intervention strategies will have to be made and resources allocated. Resources can be allocated under one of the four scenarios:

- A: Female sex workers and their clients
- B: Men who have sex with men and male sex workers
- C: Injection drug users
- D: Combination of A, B, C

## Which will prevent the most infections?

For the period 2006–2010, the number of new HIV infections estimated is 51,216. In all scenarios, new infections will be averted. However, Scenario D will prevent the most infections. By implementing Scenario D, 17,436 (34 percent) of new infections would likely be averted relative to the baseline projection. In contrast, Scenario C would only prevent 30 percent of new infections (see Figure 1).

**Figure 1. New infections for various scenarios relative to baseline projection**





## Do we have enough resources?

Current resources are inadequate to reverse the growth of the epidemic. Scenario D requires a substantial increase in program coverage for prevention, care, and treatment. To implement Scenario D, an additional US\$13.9 million for prevention needs to be mobilized.

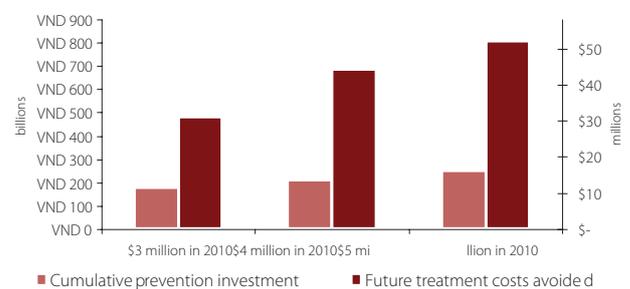
## When do we need to start?

The situation is urgent. The speed at which scaling up prevention programs occurs will determine the number of new infections that can be prevented. A delay of 12 months in increasing coverage will make a significant difference in the number of people who become infected with HIV. To avoid future costs of care and treatment, prevention is the key.

Figure 2 illustrates the treatment costs that can be avoided at various levels of investment. Higher investment results in more infections prevented and larger future savings. If prevention investment increases to US\$5 million in 2010, 20,621 new infections will be averted, a reduction of 40 percent of projected new cases. In contrast, an investment of US\$3 million by 2010 will prevent only 31 percent of new infections.



**Figure 2. Future treatment costs avoided for different levels of prevention investment**



## What if nothing is done?

If no additional resources are allocated for HIV prevention and treatment and intervention strategies and risk behaviors remain unchanged from their current levels, by 2010

- an additional 51,216 persons in HCMC will be infected
- of the new infections, 42 percent will be male clients of female sex workers, 23 percent will be the wives and girlfriends of male clients, and 5 percent will be children
- almost 8,000 new AIDS cases a year will require antiretroviral treatment
- costs for care and treatment will soar and HCMC will face an annual resource need of US\$45.7 million for AIDS treatment in 2011-20

# Recommendations

## What can be done?

- Mobilize additional resources to scale up prevention programs. The growth in new infections can be reversed but will only be achieved if prevention interventions reach sufficient numbers of people in most-at-risk populations and significantly change risk behaviors. Current resources are inadequate and urgently need to be mobilized from domestic sources, multilateral and bilateral donors, and private foundations.
- Allocate resources to ensure recommended coverage for all most-at-risk populations (Scenario D). Infection patterns in HCMC are changing: from infections occurring through needle sharing, to infections from unprotected sex with female sex workers, to infections from husband to wife. While injection drug users and female sex workers will continue to contribute to new infections, male clients of sex workers, their wives, and men who have sex with men will increasingly contribute to the total number of HIV infections. To slow or reverse trends in the spread of HIV, the most effective interventions focus on all most-at-risk populations simultaneously (Scenario D) rather than focusing on a single group. By implementing Scenario D, 17,436 new infections would be averted by 2010.
- Scale up prevention programs to save in the long run. It is imperative to mobilize additional resources from government and donor sources, so that the most effective prevention programs can be implemented at the earliest time possible. Scaling up prevention programs must occur as a matter of urgency.
- Invest in high-quality programs and voluntary counseling and testing. Mobilizing resources and achieving coverage will not guarantee success. Investing in high-quality programs that have been shown to achieve results is essential in reducing the number of new infections. In particular, expanding voluntary counseling testing coverage among male clients and their wives will be essential.
- Enhance the capacity and effectiveness of HIV/AIDS agencies. Translating increased resources into better outcomes depends on the capacity of HIV/AIDS agencies to effectively implement and coordinate programs and activities. Resources must be allocated to strengthening the capacity of HIV/AIDS program staff in implementation and coordination.