

"HIV/AIDS Modelling in Thailand: Insurance Risk"

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Thailand has been experiencing a high and rapid HIV infection growth rate due to a combination of exotic new strains of the HIV, heavy intravenous drug use, a flourishing commercial sex industry and entrenched high-risk behavior by Thai males. As measured by the number of AIDS cases reported, the Ministry of Public Health reported 5,718 new AIDS cases in 1993, jumping up from 33 new AIDS cases in 1989. Moreover, the cumulative AIDS cases reported and the sentinel seroprevalence survey indicate that heterosexual contact is the most importance route of HIV transmission in Thailand (75 percent).

The HIV/AIDS epidemic effects not only national economies and households. Enterprises may also bear HIV/AIDS related costs, which may far from negligible in sectors that are especially vulnerable to HIV/AIDS, such as the insurance sector. The impact of the HIV/AIDS epidemic on the insurance should be considered.

Four HIV/AIDS models are developed in this study for the data available in Thailand. Then they are fitted to Thai data. The results from a model fitting are used in insurance application.

We estimate that more than one percent of the Thai population and more than two percent of the Thai individual life insured population respectively are currently infected with HIV. It can be expected that AIDS deaths will reach 82,700 and 11,550 per year in 2001 in the Thai population and the Thai individual life insured population under the high HIV/AIDS epidemic scenario.

Although major uncertainties remain about the HIV/AIDS epidemic in Thailand, one thing is certain: HIV infection will continue to spread. Therefore Thai life insurance companies have to make plans for coping with the consequences of this epidemic.

