DESCRIPTION (provided by applicant) By the end of 1999, UNAIDS estimated that the number of children living with HIV/AIDS in Thailand was 13,900. Antiretroviral treatment has not yet been implemented. Five-year survival from a limited number of HIV-infected children in Thailand was less than 30%, in contrast to 75% from the US cohort before the era of HAART. The natural history from a large cohort of HIV-infected children is essential as baseline information in order to evaluate intervention including antiretroviral treatment. Since 2000, an extensive perinatal HIV prevention program has been implemented throughout Thailand. The HIV perinatal transmission rate is currently approximately 10%. The outcome of children born to HIV-infected mothers, both infected and uninfected children, in terms of behavioral and psychosocial aspects are important to identify their special needs. Overall goal of this study is to characterize the natural history of children affected by HIV/AIDS epidemic in Thailand. The comprehensive understanding of natural history in this special population will lead to development of culturally and medically appropriate interventions to improve their quality of life. The specific aims of this proposal are (1) to characterize the natural history of HIV-infected children in terms of their overall survival and survival after the development of AIDS (2) to compare the natural history of HIV-infected children before and after Pneumocystis carinii prophylaxis has been implemented in 1996. We propose to examine a retrospective cohort of 940 HIV-infected children under medical care of the Department of Pediatrics, Chiang Mai University between 1989-2001 to address specific aims 1 and 2 (3) to characterize the psychosocial problems and needs of school-aged children born to HIV-infected mothers, both infected and uninfected children (4) to characterize the behavioral outcome of school-aged children born to HIV-infected mothers, both infected and uninfected children. We propose to perform a prospective cohort study of school-aged children born to HIV infected mothers at Chiang Mai University.