

UNAIDS Series:

Engaging uniformed services in the fight against AIDS

CASE STUDY 3



# HIV/AIDS prevention and control: an experience of the Royal Thai Army in Thailand



Joint United Nations Programme on HIV/AIDS

**UNAIDS**

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### Map of Thailand



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We would like to thank the many conscripts who have given their blood to permit us to monitor the epidemic and who have provided us with valuable answers to the threat. And at last but not least, we wish to thank the men and women and children whose lives have been touched and changed by HIV/AIDS. Their sufferings have touched us and changed Thailand.

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## PREFACE

### **Message from the Commander-in-chief, the Royal Thai Army**

Since its inception, the Royal Thai Army (RTA) has played a major role in preserving our national security. Aside from its traditional defence duties, the RTA has always been actively involved in the development of the country and in providing aid to the Thai people. The RTA medical personnel have played a significant role in supporting all RTA operations. This document is truly a testament to the effectiveness and efficiency of Thai military medicine in contributing to the national effort to save the Thai people from the HIV/AIDS pandemic and this fact has been internationally recognized. It is indeed a great achievement alongside with other great distinctions achieved in East Timor, Afghanistan and Iraq.

I would like to congratulate the Surgeon General of the RTA Medical Department and the staff of the Medical Department for their outstanding work. I would like to especially thank the Best Practice Case Study Working Group in creating this document. My appreciation goes to all those who have made this document possible.

On this auspicious occasion of Her Majesty the Queen's 72<sup>nd</sup> Anniversary, the Royal Thai Army would like to request the permission to dedicate this report to commemorate HM the Queen's commitment to the well-being of the people of Thailand and the world. Long Live the Queen.

General Chaiyasit Shinawatra  
Commander-in-Chief  
Royal Thai Army



## FOREWORD

We know from experience that AIDS is more than a health issue: it is now a global security concern. Where it reaches epidemic proportions, AIDS can devastate whole regions, knock decades off national development and shake the structures of a nation: communities, economies, political institutions, and even the military and police forces. In many countries the pandemic has affected uniformed personnel far more than civilian populations. Where this is the case, AIDS debilitates command structures and compromises the readiness and capacity of the military sector to respond to security threats and instability.

Uniformed services, including defence and civil defence forces, are highly susceptible to sexually transmitted infections (STIs), mainly because of their work environment, mobility, age and other facilitating factors that expose them to higher risk of HIV/AIDS infection. This has been widely acknowledged, and both the UN Security Council and the United Nations General Assembly Special Session on HIV/ AIDS (UNGASS) have adopted resolutions calling for HIV/AIDS interventions in international and national uniformed services.

Through the Global Initiative on HIV/AIDS and Security, UNAIDS has already facilitated partnerships worldwide. During the early stage of the epidemic in Thailand the government recognised the potential threat that HIV/AIDS could pose to national security and its implications on uniformed services, and has acted on it by engaging its armed forces in a country-wide national programme to educate its soldiers on HIV/AIDS. As a principal target of this programme, young recruits are particularly important in view of their potential role as future leaders and decision-makers, and as peacekeepers in the missions. Young soldiers are also often seen as role models among their peers, and could serve as agents for change in their communities. The behaviour of young recruits and the services and information they receive determine the quality of life of millions of people.

The swift and committed action taken by the Thailand authorities and the Royal Thai Army has assured that Thailand is now internationally recognised as a country successful in tackling the HIV epidemic. This study documents the success of the Royal Thai Army's HIV/AIDS prevention and control programme, with key areas of achievement in: treatment and care of military personnel, early surveillance of HIV within conscripts, conducting medical research and development including a vaccine for HIV, and multi-sectoral cooperation. I hope this will also serve as an encouragement to the countries and their populations who are developing their work in this important field.



Ulf Kristoffersson

Director

UNAIDS Office on AIDS, Security and Humanitarian Response

## EXECUTIVE SUMMARY

The effectiveness of HIV/AIDS prevention and control programmes in Thailand is well recognized internationally and is due to the following factors:

1. The perception by all Thais that HIV/AIDS is a threat to national security.
2. The fact that policy-makers have openly admitted that Thailand has an HIV/AIDS problem.
3. Efficient mechanisms of management at all levels-in terms of both organization and resource allocation.
4. Relevant counter-measures and plans.
5. Sustained commitment in the fight against HIV/AIDS.
6. The total mobilization of all sectors of Thai society.

The Royal Thai Army (RTA) has several significant roles to play in solving the HIV/AIDS problems, along with other partners in Thai society. Those roles can be summarized as follows.

1. Partnering in the situation analysis and threat assessment of HIV/AIDS as a threat to national security.
2. Playing a role in HIV surveillance by assessing the prevalence and trends of HIV infection among the RTA conscripts. These indicators have enabled Thailand to continuously monitor the spread of HIV and to plan an effective prevention campaign.
3. Preventing and solving HIV/AIDS problems by conducting quantitative and qualitative research on behavioural risk factors of HIV infection. This led to the development of targeted intervention models first piloted with conscripts and later adapted for use with other risk groups. The RTA has been significantly involved in the implementation of the 100% condom use programme, especially in the north. The RTA has also sought to integrate HIV/AIDS intervention programmes into the anti-drug campaigns.
4. Providing care and support to people living with HIV/AIDS by establishing appropriate policies regarding HIV-infected RTA personnel.
5. Conducting research and development activities, such as the AIDS vaccine trials.
6. Collaborative, concrete actions with domestic and international partners to solve HIV/AIDS problems. The RTA has taken a key role in the multisectoral cooperation that is key to effective action against HIV/AIDS. This is a good example of civil-military cooperation in combating against HIV/AIDS.





The RTA has been internationally recognized for the following achievements:

1. Formulation of clear and appropriate policy on HIV prevention in the RTA.
2. Establishment of an epidemiological surveillance database, which is widely recognized as a sound means of assessing the situation and trends of the epidemic and of evaluating the success of national HIV/AIDS programmes.
3. Development of HIV prevention models suitable for military settings.
4. Alleviation of HIV/AIDS-related problem among the general public.
5. Development of basic infrastructure for conducting clinical vaccine trials.
6. Establishment of technical coordination and collaboration networks at the national and international levels.

Factors that have contributed to the success of the RTA's operation include the following:

1. Strong organizational infrastructure and management.
2. Relevant strategies and measures.
3. Determination for long-term commitment.
4. Total mobilization of resources and multisectoral coordination in the expected long-term fight against HIV/AIDS.

Shortage of personnel and financial resources are two of the most important obstacles in the RTA's fight against HIV/AIDS. Continuity and sufficient support are needed to make a sustainable impact on the epidemic.

The lessons learnt from the RTA's experience in HIV/AIDS prevention and impact alleviation can be used as a basis for further development towards more effective and efficient models. It can also be a useful example for other agencies in Thailand and other countries with similar problems and similar socio-cultural backgrounds to apply and adapt for their own use.

## INTRODUCTION

Thailand was one of the most severely affected countries during the early stage of the AIDS pandemic. However, the country openly addressed the problem and implemented strict and continuous preventive measures. These measures have been well recognized for their effectiveness in reducing the cumulative number of HIV infections from the previously estimated number of 6-8 million infected by the year 2000<sup>(1)</sup> to a more recent computerized projection of 1 million infected people<sup>(2)</sup>. The number of new infections is estimated to be around 25,000 per year-down from the estimated annual figure of over 100,000 persons. The success of Thailand's HIV-prevention-and-control campaigns has been internationally acknowledged.

What is the secret of Thailand's success in preventing and controlling the spread of HIV? It can be simply put: acknowledging the problem, taking actions to solve the problem, and implementing appropriate interventions.

By acknowledging that HIV/AIDS could pose a major problem to Thai society and national security and by having the courage to admit the existence of the epidemic, the Thai authorities have been able to motivate and raise the awareness of the whole nation. The perception of HIV/AIDS as a threat to national security has made it justifiable to mobilize all national resources to nullify the threat.

The success of the Thai HIV/AIDS programme can be directly attributed to its multisectoral approach—an approach that has drawn upon the country's manpower, funds, equipment, knowledge, expertise and national will. This collaborative approach has created a sense of responsibility in every sector, and has led to the concept that HIV/AIDS is not just a public health problem; it is the problem of every person in every community and all sectors of society, including education, labour, industry and the military, should be involved in resolving it.

The military is an agency with several intrinsic characteristics that can be used to carry out an HIV/AIDS prevention and control operation effectively and efficiently. These characteristics include the following:

### 1. Discipline

The military has a strong and unified command hierarchy.

### 2. The ability to take swift action

The military has been trained in rapid situational analysis, assessment and response.



### **3. Basic organizational infrastructure**

The Royal Thai Army (RTA) has a strong fundamental medical organizational structure, geared for both peacetime and wartime operations. There are numerous RTA medical units throughout Thailand with the RTA Medical Department supervising the operational guidelines and standards.

### **4. Organizational readiness**

Although not all RTA medical units are under the direct command of the RTA Medical Department, all of them have to follow the same basic infectious disease surveillance and control guidelines being monitored by the Department. Although military personnel are not specifically trained to implement an HIV/AIDS response, their preparedness to deal with diseases outbreaks forms a good basis for coping with the HIV/AIDS problem.

### **5. Recent experience**

From their experiences in dealing with communist insurgency in 1965-1983, Thai officials learned how to mobilize different sectors of society to cooperate against a common threat to national security. This was the so-called 'Civilian-Police-Military Front' approach. In 1991, when HIV/AIDS was considered to represent such a threat, lessons learned from the recent past could be applied fairly easily to cope with this threat.

The body of knowledge gained from epidemiological studies regarding HIV/AIDS among the RTA personnel has provided an understanding of the dynamics of the epidemic in Thailand. Moreover, successful behavioural change interventions in the RTA provide valuable lessons that can be applied in other population groups engaging in risky behaviours. Additionally, the RTA personnel who have been trained in the RTA HIV/AIDS programmes such as 'friend-help-friend' peer educators will be useful when they re-enter civilian life after their discharge from the army.

The authors wish to present these conclusions and concepts so that other groups, Thai or international, may make apply them in their respective situations.

## Chapter 1

### The HIV/AIDS situation in Thailand and evaluation of the threat

#### A. The HIV/AIDS epidemic in Thailand

The first case of HIV/AIDS in Thailand was reported in 1984 in a man returning from abroad. However, it was suspected that HIV/AIDS had been in the country for four-to-five years before that. In response to the epidemic, the Ministry of Public Health had included AIDS in the list of notifiable communicable diseases since 1985, requiring reports of cases when detected. This requirement was dropped in 1991 and replaced by sentinel surveillance activities, which have been in place since June 1989. The sentinel surveillance was initially started twice a year in a few provinces and then expanded nationwide in 1991; it has been reduced to once a year since June 1995.

Findings from sentinel surveillance and some research studies, as well as the passive case-reporting system have provided a full picture of the HIV/AIDS epidemic, which can be divided into the following six stages<sup>(2,3)</sup>:

- Stage 1. The epidemic began with the transmission among men who have sex with men, during the period from 1984 to 1987. The prevalence was relatively low. Many surveys were conducted during this period and only one sex worker in Pattaya was found to be infected with HIV. This finding caused those concerned to believe that HIV/AIDS was not a major problem in Thailand.
- Stage 2. The spread of HIV into injecting drug users was detected in 1988, with 15.6% of those surveyed in March found to be infected, compared to 1-2% in 1987. Prevalence has been over 30% since mid-1988. This finding caused serious concern and immediate attention was paid to the problem.
- Stage 3. HIV began to spread into the sex-worker population. The prevalence of infection among this population group had rapidly increased in 1988-1990, from 0.5% in Chiangrai province and 0-0.4% in Bangkok, Chiang Mai and Pattaya in 1988, to 44% in a survey in Chiang Mai in June 1989.
- Stage 4. The spread of HIV to males frequenting sex workers who attended sexually transmitted infection (STI) clinics, began to be apparent in 1990.
- Stage 5. HIV was found to have spread to housewives, as demonstrated by the pregnant women attending various antenatal clinics. The first case was identified in 1991, followed by more and more cases. These women did not report risky behaviour. They contracted the virus from their husband.



- Stage 6. Infection was found in the newborns of HIV-infected mothers.

The presence of HIV infection among women and infants indicated a serious situation and called for immediate action.

## **B. The HIV/AIDS problem in the Royal Thai Army (RTA)**

It had been widely accepted that servicemen, especially conscripts in the RTA, were one of the groups at high risk of HIV infection<sup>(4,5)</sup>. When there was a reported spread of HIV in the country, the RTA carried out an immediate assessment of the HIV/AIDS situation among its personnel.

The assessment yielded the following findings:

- In 1987, the first case of HIV/AIDS was detected among RTA personnel.
- Continuing assessment of HIV prevalence among RTA conscripts since 1989 has revealed increasing trends—from 0.5% at the outset, to a peak of 4% in 1993, followed by a gradual decline to less than 1% in May 2003. These prevalence data, obtained primarily from 21-year-old conscripts, is one clear indicator of the general HIV/AIDS situation in the country.

### **Impact and threats in the RTA caused by the HIV/AIDS epidemic**

The RTA became seriously concerned about the consequences of HIV/AIDS when the virus began to spread among men frequenting sex workers in 1990 and, gradually, among the general population and young people. The following impacts were identified:

#### **Direct impact**

- The military preparedness of the RTA has suffered as a result of HIV/AIDS, which has caused illness and death among RTA personnel. The RTA is now faced with the challenge of needing to recruit HIV-negative personnel while avoiding human rights violations.
- There is a psychological effect, due to the anxiety and discrimination associated with HIV, both from inside the RTA and from the families of army personnel in their own communities.
- There are additional burdens for the medical and social services in the RTA, including the cost of campaigns to prevent new infections, counselling services for groups at risk and for those infected, care for people living with HIV/AIDS, and social support measures for them and their families.
- Field medical services personnel are at risk of contamination from HIV-positive patient's blood and body fluids, and must screen all blood for field use.

- Screening for deployment for overseas missions, such as the UN peacekeeping force, is more complicated and time-consuming for groups at risk of contracting HIV.

### **Indirect impact**

- Over time, the HIV/AIDS epidemic has resulted in economic, psychosocial and political instability in Thai society.



## Chapter 2

### The role of the Royal Thai Army in HIV/AIDS prevention and impact alleviation and Thailand's response to HIV/AIDS

In responding to HIV/AIDS, Thailand has worked through the following five phases:

#### **Phase 1: The denial period, 1984-1987**

The first case of AIDS was reported in 1984. This was the beginning of the epidemic. The first group of people to call for serious prevention and solution measures for HIV/AIDS were medical and public health personnel who witnessed the problem first-hand. HIV was considered to be a communicable disease and the responsibility of the Ministry of Public Health. This was reflected by the appointment of the Director of Communicable Diseases Office as the chairman of the National AIDS Committee. As a result, HIV/AIDS awareness was mostly confined to the medical and public health fields, and awareness and prevention campaigns were quite limited.

At the national level, HIV/AIDS was perceived as a confidential issue. For fear of affecting tourism and the country's image there were only limited concrete campaigns or efforts to educate the public. Moreover, surveillance activities were inadequate and did not accurately reflect the threat posed by the epidemic. During this phase, it was believed that the HIV/AIDS problem was not serious, and that existing communicable disease control measures were sufficient to cope with the problem.

Thailand missed the opportunity to prevent the spread of the epidemic in its early stages, when it would have been easier to contain and reverse as the impacts were still small.

#### **Phase 2: The awakening period, 1987-1990**

In this phase, the HIV/AIDS situation was clearer. Objective epidemiological information was made available by the Ministry of Public Health, the danger of HIV/AIDS was fully recognized and the need for an effective response to solve the problem was acknowledged. There were attempts to search for effective epidemiological and problem-solving interventions or models as well as strategy development for clear and specific responses. The obvious action to be taken at this stage was the dissemination of HIV/AIDS information to the public, based on the assumption that greater awareness would encourage people to avoid engaging in risky behaviour. However, there was insufficient epidemiological information and a tendency among the general public to be hostile towards, and discriminate against, people living with HIV/AIDS.

As the epidemic of HIV/AIDS in the North was the most critical, governmental and nongovernmental organizations in the region were fully alerted and tasked with tackling the problem. The prevention strategies in the initial stage were composed of educating the public on the risks of HIV and raising awareness in an attempt to reduce the level of risky behaviour. Although these campaigns resulted in increased public knowledge of HIV/AIDS, there were some adverse consequences. People were frightened of infection, and infected persons were discriminated against, while the practice of risky sexual behaviour—the main risk factor in the country—remained almost unchanged.

For the Royal Thai military, HIV/AIDS interventions during this phase took the form of both top-down policy implementation and bottom-up strategy development.

Using the top-down approach, the Royal Thai military had established HIV prevention and control committees at ministerial and periphery levels to take action in accordance with the national HIV/AIDS policy. However, the operations were performed without adequate supportive epidemiological information. Therefore, interventions were mainly adaptations of those used in other countries, and they may not have correctly addressed the issues that were specific to Thailand's situation. This made implementation difficult for some Royal Thai Army (RTA) units and, thus, many units began to develop their own bottom-up operations.

The starting point of this bottom-up approach was when some RTA units in areas with a concentrated epidemic were aware of the HIV/AIDS problems at the national and local levels as a result of information provided by the central supervisory units and other relevant local sectors. Although there was limited instruction from the higher units, some RTA units in the North, especially in the medical units, had taken an active role in HIV prevention and control. Two RTA units were particularly effective in their responses: the Fort Naresuan Hospital in Phisanuloke province and Fort Kawila Hospital in Chiang Mai province. Their responses are described in detail later in this document.

### **Phase 3: The operation period, 1991-1996**

HIV/AIDS prevention and impact-alleviation programmes were concretely and effectively carried out at the national level and by the RTA. The main theme of the response was a clear message that HIV/AIDS was a threat to national security. Strategies were clearly formulated and they became the key to unified efforts to resolve the HIV/AIDS problem.

For the RTA, the bottom-up approach implemented by Fort Naresuan and Fort Kawila Hospitals was adopted and adapted, and effectively integrated into the top-down policy of the central leadership. Some good examples of this include (1) the application of a 'peer education' model in the 'Preventive Dam' project; (2) the new research and development





programme by the Armed Forces Research Institute of Medical Sciences (AFRIMS) in Prachuab Khiri Khan Province; and (3) policy formulation regarding people living with HIV/AIDS.

#### **Phase 4: Dealing with the effect of the Asian economic crisis, 1997-2002**

The Asian economic crisis occurring during this period had halted and, in some cases, terminated many HIV/AIDS prevention and impact-alleviation programmes. There was a need to review past operations in order to remain focused on the positive achievements of existing programmes.

#### **Phase 5: Economic recovery, since 2003**

With the recovery of the economy, existing operations were re-evaluated and renewed. Reviews and assessments were conducted in order to improve prevention and impact-alleviation measures.

In its response to the epidemic, the RTA has actively been performing roles and functions in full compliance with the national policy on HIV/AIDS prevention and impact alleviation. Such roles include the following:

- 1: Development of national HIV/AIDS prevention and impact-alleviation policy and programmes
- 2: Monitoring of the national HIV/AIDS situation
- 3: Implementation of HIV-prevention programmes
- 4: Provision of care and support to people living with HIV/AIDS
- 5: Promotion of HIV/AIDS research
- 6: National and international coordination and collaboration on HIV/AIDS

## Part 1: The role of the RTA in developing national HIV/AIDS prevention and impact-alleviation policy and programmes<sup>(6-10)</sup>

### A. The National Committee on AIDS Prevention and Alleviation

The National Committee on AIDS Prevention and Control was established in 1984, and has undergone many revisions. Since the 1991 revision, the Prime Minister was appointed by the cabinet to be the committee Chairman. Committee members include representatives from many governmental agencies, nongovernmental organizations, the private sector and people living with HIV/AIDS. Currently called the National Committee on AIDS Prevention and Alleviation, the committee has developed many national plans, including the following:

- National Plan on HIV/AIDS Prevention and Alleviation (1992-1996) with an additional Operation Plan on HIV/AIDS Prevention and Control (1995-1996).
- National Plan on HIV/AIDS Prevention and Alleviation (1997-2001).
- National Plan on HIV/AIDS Prevention and Alleviation (2002-2006).

Participation of the Ministry of Defence in the National Committee has provided a good opportunity for the military sector to take part in the development of national HIV/AIDS policy, as well as providing advice on appropriate HIV/AIDS approaches in the military and the establishment of military strategies and interventions that are in line with the national policy.

### B. The RTA Medical Department Committee on HIV/AIDS Prevention and Control

In 1989, a Committee on HIV/AIDS Prevention and Control was set up in the RTA Medical Department. Activities of this committee include the following:

- The working and the implementing body on HIV/AIDS of the RTA.
- Conducting HIV testing of military personnel with the intention of discharging those who were HIV-infected. This expulsion policy was subsequently replaced by care provision (except for those who contracted HIV through needle sharing and for AIDS patients who required hospitalization).
- HIV screening of the RTA conscripts since 1989.
- Formulation of army policies on HIV/AIDS, as follows:

Prevention policy:

- Promote awareness of the risks of HIV and help reduce risky behaviour
- Move forward more strategically and steadily
- Encourage the use of condoms, particularly among young conscripts

HIV case detection and care-provision policy:

- Provide voluntary HIV counselling and testing service in medical units
- Reserve the rights to refuse recruitment of HIV-positive persons into the RTA.



- Support measures for caring people with HIV/AIDS to enable them to resume their normal life.

Medical care policy:

- Promote fair and humane conduct towards HIV-infected personnel
- Improve the capacity of medical personnel in AIDS treatment and care

Policy on cooperation with other agencies:

- Promote cooperation between units of the RTA and other governmental and nongovernmental organizations on problem-solving measures relating to HIV/AIDS.
- Promote international cooperation on HIV prevention.

Research and development policy:

- Promote research on, and development in, measures to resolve HIV/AIDS-related problems.



HIV testing at the Armed Forces Research Institute of Medical Sciences

### **C. Committee on AIDS Prevention and Control, Ministry of Defence**

In 1991, the Committee on AIDS Prevention and Control was established in the Ministry of Defence. This committee was set up to undertake the following activities:

- Formulate HIV/AIDS policies for the Ministry of Defence
- Organize study tours overseas
- Organize HIV/AIDS seminars for military personnel
- Monitor and evaluate HIV/AIDS programme in the military

### **D. Committee on AIDS Prevention and Control, the RTA**

In 1994, the committee on AIDS Prevention and Control was set up in the RTA to be responsible for the following activities:

- Implement a course of action corresponding to the national HIV/AIDS prevention and impact-alleviation policy, as well as to the order issued by the Defence Ministry, which required all top-ranking officials under the Ministry of Defence to be responsible for HIV prevention and control and to set up working committees on HIV/AIDS. This policy was a top-down approach in a multi-layered operational management system to establish AIDS committee and plan at all administrative levels.
- Assign HIV/AIDS-related activities as a responsibility of the personnel directorate
- Support the goals set by the AIDS Committee of the RTA Medical Department

In addition to the national- and central-level policy formulation, the RTA units in the field have also been actively participating in the multisectoral response to prevent and alleviate HIV/AIDS-related problems at the local level.



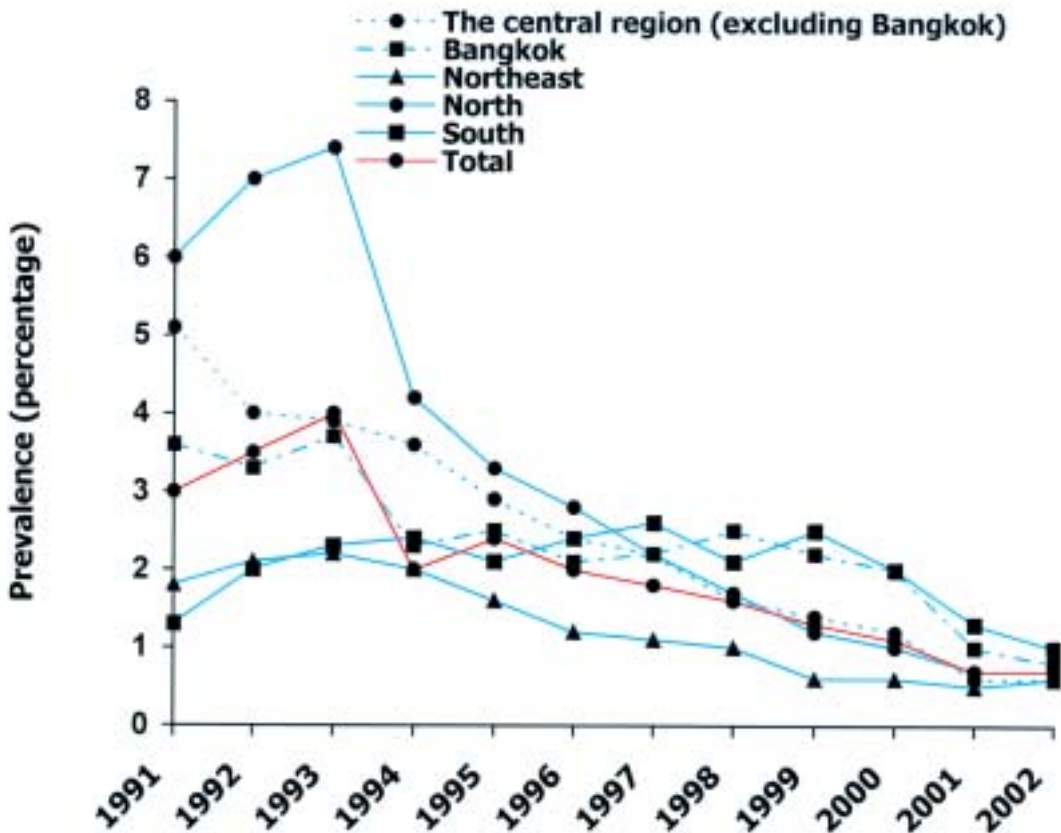
## Part 2: The role of the RTA in monitoring the national HIV/AIDS situation

The role of the RTA in conducting HIV/AIDS surveillance involves the following measures:

### A. HIV surveillance among RTA conscripts<sup>(11,12)</sup>

Recruitment of Thai males (mostly 21-year-olds) occurs in April every year. Placement takes place twice a year in May and November. Since November 1989, the Army Institute of Pathology, King Mongkut Medical Center and the AFRIMS of the RTA Medical Department, in cooperation with 37 military hospitals, have conducted HIV screening among RTA conscripts in order to assess the prevalence of HIV infection among this group of Thai men. Demographic data have been additionally collected since 1991. Data from this measure are useful in planning of the RTA reserve, workforce administration, and the arrangement of counselling services to improve the quality of life of affected persons (see Figure 1).

**Figure 1.** HIV prevalence among RTA conscripts, classified by their longest residency during the two years prior to recruitment



In the beginning, it was found that the HIV/AIDS epidemic in the North was the most critical. In 1993, national HIV prevalence was found to be as high as 7.4%. The situation improved after all concerned sectors undertook HIV-prevention-and-control campaigns. At the same time, HIV prevalence in most regions was gradually declining and the national prevalence fell to 0.7% in 2002. As of early 2002, the highest prevalence was observed in the South of 1%.

Findings from these campaigns showed that HIV prevalence among RTA conscripts was still on the decline.

Surveillance activity was conducted as a total population survey, not through a random sampling process. Therefore, the data obtained are highly valid. The Ministry of Public Health and many agencies have utilized these data as an indicator to monitor the HIV/AIDS situation and trends at both regional and national levels—particularly the situation among young men who are considered to be at high risk of contracting HIV sexually. The reduction of HIV prevalence among RTA conscripts is a good indicator of the success of HIV-prevention programmes in Thailand.

### **B. Behavioural surveillance among RTA conscripts<sup>(13-15)</sup>**

In 1991, the Preventive Medicine Division of the RTA Medical Department began surveillance among a sample group of 400 in Bangkok. The surveillance was subsequently expanded nationwide in 1992. In collaboration with the Epidemiology Division of the Ministry of Public Health since 1995, the sample size has become 5,000 per year. It was found that the rate of condom use has gradually increased—from 34% in 1992 to more than 80% in 2001. In Bangkok, the percentage of consistent condom use among RTA conscripts when having sex with sex workers increased significantly—from 26% in 1991 to more than 80% in 2001. This percentage continues to increase.

### **C. Surveillance of sexually transmitted infections (STIs) among RTA conscripts<sup>(13)</sup>**

The Preventive Medicine Division of the RTA Medical Department has collected reports on STIs from treatment units within the army since 1991 to monitor the trend of these diseases as an indicator of the extent of the spread of HIV. It was found that this rate decreased from 150 per 100,000 in 1993 to fewer than 10 per 100,000 since 1997.

### **D. Surveillance of HIV/AIDS patients among RTA personnel<sup>(13)</sup>**

The Preventive Medicine Division of the RTA Medical Department has collected reports on HIV and AIDS patients in the RTA from the medical units across the country since 1987 to obtain data for the preparation of HIV/AIDS-related care. Since 1991, when reporting of HIV diagnoses was no longer required by law, the reports have covered only AIDS patients. This is the passive case-reporting system used by the Ministry of Public Health, and the



same type of form is used. The data are summarized monthly and annually, showing the number of cases receiving services from the RTA medical care facilities.

#### **E. A 'knowledge, attitudes and prevention' survey of HIV/AIDS in the RTA<sup>(13)</sup>**

In 1993, the Preventive Medicine Division of the RTA Medical Department conducted a survey on the knowledge, attitudes and preventive practices among 1,002 RTA personnel. It was found that over 70% had been informed about HIV/AIDS from the RTA medical officers. More than 75% had accurate knowledge about HIV/AIDS and more than 55% consistently used condoms in extra-marital sexual relations. The Division had also collaborated with the Sub-committee on Research and Evaluation of HIV/AIDS Prevention and Control of the RTA Medical Department and AFRIMS in the evaluation of the RTA HIV-control campaigns. In the follow-up to the repeated research activities, it was found that most RTA personnel at all levels had a good level of knowledge. However, the attitudes and preventive practices were still not satisfactory, especially among young male personnel. The rate of condom use remained at 70% or lower, requiring a continuous campaign against risky behaviour.

### Part 3: The role of the RTA in implementing HIV-prevention programmes

From the widespread campaigns to disseminate information on HIV/AIDS in 1989-1990, it was found that the RTA personnel had better knowledge of HIV/AIDS than before, while their attitudes and behaviour still needed improvement. Faster and more effective measures needed to be identified to curb their risky behaviour. Due to a central policy of allowing more autonomy to the RTA medial units, two operational research projects were initiated in RTA forts in 1991-1994—one in Phitsanuloke and the other in Chiang Mai. Both models had conscripts as target groups and adopted the same peer education or 'friend-help-friend' approach. In the model in Chiang Mai, high-ranking officers up to the battalion level\* were assigned specific roles to support the project, resulting in better sustainability. The Phitsanuloke model only had a peer education component, without the knowledge and understanding of superior ranking personnel, and thus lacked supervisory support. The two models were later adjusted and incorporated into a third project in Prachuab Khiri Khan, where the involvement of the division level\* was added. Activities to scale up this approach were affected by the economic crisis and the targets were not met. However, this focus-group approach has been well accepted by many expert groups, and has been applied to other target groups, such as teenagers in schools and workers in factories.

A brief summary of the three models follows:

#### A. The fight against AIDS among RTA conscripts in Chiang Mai<sup>(4,16)</sup>

Chiang Mai was one of the first provinces to face a serious HIV/AIDS epidemic. Since 1987, Fort Kawila Hospital had organized special HIV/AIDS talks by experts, set up exhibitions and worked with small groups. In 1993, the hospital cooperated with the Institute of Social Research and the Research Institute for Health Sciences of Chiang Mai University, as well as the AFRIMS and US Johns Hopkins University conducting a project entitled Social Mobility, Sexual Behaviour and HIV in Northern Thailand, or SOMSEX, aimed at curbing risky behaviour among RTA conscripts who had been with the RTA for two years.

The project involved the following three stages:

Stage 1: In the first six months, a behavioural study was conducted, giving training to squad leaders, field medics, chaplain, non-formal-education teachers and conscripts with leadership qualities to conduct in-depth behavioural interviews with conscripts. It was found that:

1. the conscripts did not have knowledge or clear understanding about HIV/AIDS
2. excessive consumption of alcohol led to brothel visits and unsafe sex
3. some conscripts used condoms, but incorrectly and inconsistently

\* See Chart 2 : Royal Thai Army organization



4. conscripts who had contracted an STI did not always obtain appropriate treatment

Stage 2: In the subsequent 18 months, activities were organized to change the risky behaviour of the conscripts. From the data gathered, workshops on knowledge about, and attitude development towards, HIV/AIDS were given to those who were influential with conscripts. Duties were specifically assigned according to rank, as follows (see Table 1):

1. Squad leaders as superiors and advisers
2. Field medics as health supervisors
3. Chaplains or assistants as advisers on morale, etiquette and quality of life
4. Non-formal-education teachers as instructors
5. Conscript leaders as trainers

**Table 1:** Activities of SOMSEX coordinators ADJUST TABLE HORIZONTALLY

Activities	Method	Coordinators				Con-scripts
		Squadron Leaders	Field medics	Non-formal-education Teachers	Chaplain	
Moderation of drinking - no drinking - drinking but no sex	- Dharma training	✓	-	-	±	✓
Correct condom use	- Lecture - Condom supply	✓	±	✓	-	±
Moderation of risky sexual behaviour - no brothel visits	- supply sports equipment - Dharma training	✓	±	-	±	±
Prevention of STIs and proper STI treatment		-	✓	±	-	-
Mental stability and personal responsibility		-	-	-	✓	-

✓ primary

± secondary

Stage 3: Evaluation after two years of operation

It was found that the conscripts had reduced their risky behaviour after repeated exposure to HIV/AIDS information and the incidence of HIV subsided significantly, with no new cases reported.

### **B. Development of the ‘friend-help-friend’ campaign in Fort Naresuan, Phitsanuloke<sup>(17-19)</sup>**

The ‘friend-help-friend’ campaign against HIV/AIDS in Phitsanuloke was designed to rapidly reduce the level of risky behaviour among the target groups. This was in response to an evaluation of the large-scale information dissemination begun in 1989, which showed that, although the level of knowledge improved satisfactorily among the target groups, behaviour did not. Therefore, Fort Naresuan Hospital, in conjunction with the HIV/AIDS Collaboration, started to use a qualitative research technique of in-depth interviews and focus-group discussion with conscripts enlisted in May 1991. The results showed that conscripts needed a clear channel of information that was easy to understand, non-threatening and coming from someone they could trust.

With these findings, the Programme on Appropriate Technology for Health (PATH)—an organization skilled in media techniques—was contracted to design the ‘friend-help-friend’ campaign as a pilot project to publicize HIV prevention among conscripts. The project was designed to 1) provide practical knowledge to conscripts so that they become aware of the risks of HIV and can be effective in helping to prevent further spread of the virus; 2) be sustainable; and 3) be replicable in other forts.

The first component of this project was to select suitable conscripts to be key persons or instructors. The second component was to design a programme to educate these leaders and build up the right attitude and skills to transfer their knowledge to others. The last component was to provide these peer educators with full support.

This project was piloted and subsequently evaluated in June 1994. Its success allowed for scaling-up, beginning with the training of ‘primary instructors’ who would train local RTA personnel as ‘secondary instructors’ to train the conscripts. The model was prepared for nationwide implementation under the name of the ‘Tamnob Project’.

### **C. The ‘Thanarat Model’ on behavioural change operations among RTA conscripts<sup>(20)</sup>**

The Thanarat Model was used in setting up activities to promote knowledge of HIV and its prevention to the conscripts in Prachuab Khiri Khan province where there are four major Army divisions\*. The format used in these activities was derived from the SOMSEX and ‘friend-help-friend’ projects, both of which had conscripts as main targets. Moreover, it



\* See Chart 2 : Royal Thai Army organization

relied on the influence of the organization personnel structure and the RTA administration as key factors in behavioural change. The influential personnel were field medics, squadron leaders, chaplains and non-formal-education teachers. These peer educators had an important role, as they understood the behaviour and problems their peers might be experiencing. In this model, the peer educators mainly worked to support influential RTA personnel.

The Thanarat Model (see Figure 2) recognized the RTA command structure and administrative hierarchy was crucial to the success of the operation and policy implementation set by the Defence Ministry regarding the duties of its personnel and of the armed forces in HIV prevention and control.

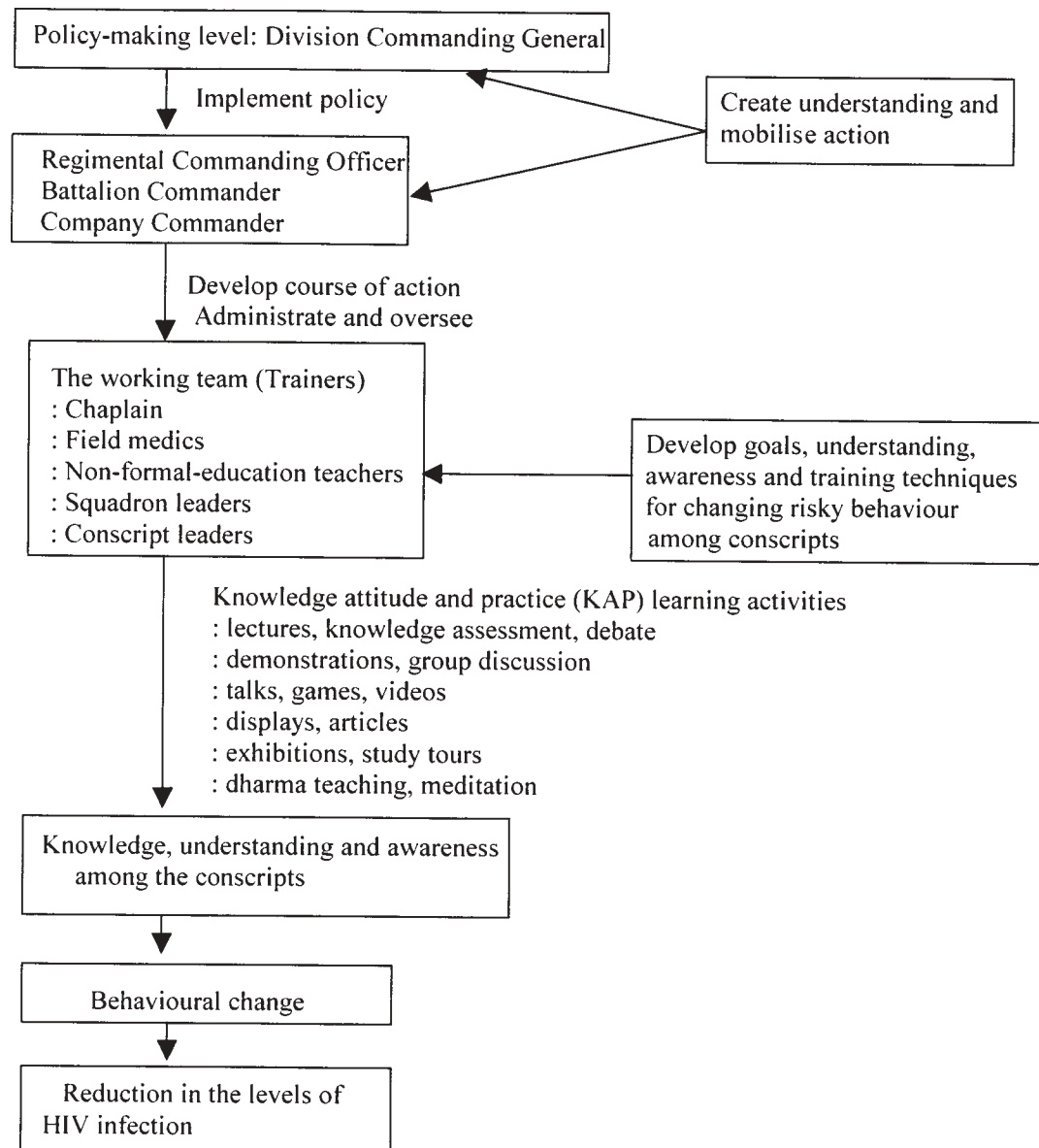
#### Results of the projects

A reduction in risky behaviours resulted in fewer visits to sex workers, reduced drinking, and increased and correct use of condoms, both with sex workers and partners. HIV screening of conscripts to assess the model's effectiveness revealed that the conscripts had a lower HIV incidence. No new infections were detected in their last six months of duty. This confirmed the success of the project in reducing the risky behaviours of the conscripts.



**Peer educator conducting a HIV/AIDS awareness session held at Thanarat Hospital in 1997.**

**Figure 2. Behavioural change campaign under the RTA hierarchical organization (Thanarat Model)**



## **Part 4: The role of the RTA in providing care and support to people living with HIV/AIDS**

Located across the country, the Fort hospitals have been active in providing care to people living with HIV/AIDS—not only to those in the RTA but also to their families and the general public. The services provided are counselling, diagnosis and treatment, in accordance with the Ministry of Public Health guidelines.

The RTA Medical Department initially ruled that conscripts found to be infected with HIV/AIDS would be discharged with consent from their superior and physician. RTA personnel found to be HIV-infected or suffering from AIDS would receive counselling and symptomatic treatment. However, a revised policy was adopted in 1991 when more cases of HIV infection were found. The policy stated that any RTA personnel who contracted HIV from sharing drug-injecting equipment or any conscripts requiring hospitalization would be dismissed from the RTA, while those who contracted HIV in other ways would receive care in the RTA hospital, or resume normal duty, with adjustments, if necessary.

In 1998, another guideline was issued with regard to the assignment of work to HIV-positive personnel that would not be physically or psychologically stressful<sup>(21)</sup>, as follows:

### **A. The conscripts**

- Asymptomatic HIV-infected persons would be assigned suitable work from their superiors and regularly seek advice from medical officers, as needed.
- Symptomatic HIV/AIDS cases would continue to receive care within their rights until the end of their term, unless their superiors recommended dismissal.

### **B. The regular RTA personnel (Commissioner and Non-commissioner Officers)**

- Asymptomatic persons would receive the same treatment as the conscripts.
- Symptomatic cases would receive care within their rights and be able to take sick leave, in accordance with the leave regulations.
- AIDS patients in a critical condition and unable to perform their duty would receive consideration under the same criteria as patients with other diseases.
- The superiors could provide any rightful assistance, moral and/or financial, to personnel with AIDS and their families.
- The superiors could encourage the families and local communities to care for AIDS patients. With limitations on the facilities and the high costs from long hospital stays, the RTA hospitals could periodically admit critical AIDS

patients for treatment. However it was felt that patients with chronic diseases would receive better care and moral support from their families at home.

- The RTA units dealing with AIDS could seek cooperation from other agencies, such as temples, charity groups and nongovernmental organizations in organizing rehabilitation centres for AIDS patients.

In the beginning, psychiatrists in the RTA hospitals had been solely responsible for providing counselling on HIV/AIDS. When additional budgets on HIV/AIDS were allocated to the RTA as of 1992, the RTA Medical Department organized regular two-to-three-day training workshops for counsellors. Those who attended were doctors, nurses, social workers and officers from the Preventive Medicine Division. The trainees were assigned to provide counselling services in their workplaces. In 1993, these workshops was developed into a five-day training session<sup>(13,22)</sup>.

Since 1992, antiretroviral medication has been provided for HIV-infected personnel and for AIDS patients in the RTA medical facilities.



## Part 5: The role of the RTA in promoting HIV/AIDS research

In 1991, the Armed Forces Research Institute of Medical Sciences (AFRIMS), in cooperation with Walter Reed Army Institute of Research (WRAIR) USA, started a project to conduct research on HIV/AIDS in the areas of epidemiology, virology and HIV/AIDS vaccine development, with an understanding that AFRIMS would concurrently receive assistance for personnel and infrastructure development.

This joint research project included the following areas:

### A. Epidemiology

A series of epidemiological studies of HIV/AIDS were carried out (see Part 2 of this document).

### B. Virology<sup>(23)</sup>

A research study was conducted to investigate the natural course of the disease in AIDS patients in Thailand. Another study investigated the HIV viral subtypes. With this latter study, the A/E and B types of HIV were identified. This led to further development of laboratory technology in HIV/AIDS such as the use of Polymerase Chain Reaction (PCR), PCR subtypes and gene sequencing. The project also supported a study on the epidemiology of HIV infection at the molecular level.

### C. Vaccine development

HIV/AIDS was still a very sensitive subject to talk about in Thai society, which hindered vaccine development. Since the Thai Government had a clear policy for resolving the problem and supported AIDS vaccine development, the RTA, in cooperation with the US Army medical science research team and other educational institutions, progressed efficiently in their research work.

In 1991, AFRIMS, in collaboration with the US Army, took a leading role in AIDS vaccine development in Thailand. The RTA undertook this project because its conscripts were considered one of the high-risk groups and HIV screening tests had already been administered at the time of enlistment. Hence, the epidemiological study of HIV infection among this group was already under way.

The AFRIMS operation can be described in three steps:

**Step 1:** *The study of safety and immunogenicity of candidate vaccines (Phase I and Phase II)<sup>(24-27)</sup>*

The objective of this study was to find the most appropriate vaccine for field testing (Phase III). Started in 1993, the joint research project for an AIDS vaccine extended its collabora-

tion to the Research Institute for Health Sciences, Chiang Mai University in 1994 and to two faculties of Mahidol University: the Faculty of Tropical Medicine and the Faculty of Medicine, Siriraj Hospital in 1996. The collaborating research network was called TAVEG-the Thai AIDS Vaccine Evaluation Group.

In 1994-2001, TAVEG conducted five projects of Phase I and II vaccine research.

- **Projects 1-3:**

These are Phase I/II studies using rgp120 vaccine developed from laboratory-derived B sub-type combined with E sub-type extracted from HIV-infected patients in Thailand. This was the first study of E sub-type HIV in the world. The study revealed that the vaccines were safe and the test volunteers responded positively. The vaccines could boost a humoral type of immunity that could neutralize a laboratory-cultured virus but not the virus extracted from AIDS patients. This could be explained by the fact that cellular immunity might be crucial in preventing HIV infection. As a result, TAVEG was interested in further studies of vaccines that boosted cellular immunity.

- **Projects 4-5:**

These studies focused on 'prime-boost vaccines' believed to be crucial in creating both humoral and cellular immunity. Prime-boost vaccines consist of prime vaccine (canary pox recombinant vaccine) to activate cytotoxic lymphocytes (CTL), followed by rgp120 vaccine to boost humoral immunity. The prime vaccine used was VPC 1521, cultivated from canary pox virus, which included a particular gene isolated from Thailand.

The boost vaccine was developed from viruses extracted from patients and laboratory-cultured sub-types E and B. The results showed that the vaccines were safe. The vaccines could boost humoral immunity and neutralize laboratory-cultured virus but not the virus extracted from patients. The vaccines also boosted cellular immunity.

**Step 2: Cohort development for AIDS vaccine field study<sup>(28-30)</sup>**

In cohort development, AFRIMS operated in four groups:

**Group 1: Army conscripts**

The study began in 1991 with HIV testing of RTA conscripts every six months until they had completed their two-year term. The results showed that this population group was not a suitable target group for AIDS vaccine field study. Although the HIV incidences were high (1.28 per 100 person-year), the follow-up rate was low (46-55% in the second year). The limitations came were due to RTA personnel relocations, as well as the fact that this group was not independent enough to make their own decisions.

**Group 2: Sexually transmitted infection (STI) clinic attendees**

With cooperation from the Ministry of Public Health, this risk group was studied in 1995 in three STI clinics in Bangkok, Chonburi and Lampang. The volunteers were followed up for





blood testing every four months for a period of one year. Seventy-eight per cent of them remained with the project. HIV infection was found in men only, with the incidence of 1.4 per 100 person-year. The main problem here was the difficulty of finding volunteers due to a massive decrease in STIs in the country. Therefore, this was not a suitable group for cohort development.

**Group 3:** Family planning clinic attendees

In 1997, increasing HIV prevalence was observed among pregnant women receiving antenatal care, particularly in Rayong province, where high prevalence was also found among RTA conscripts. In 1998, a study was carried out in this province among women receiving family planning services at sub-district health centres. It was found that HIV incidence in this group was 0.39 per 100 person-year, which was too low for an AIDS vaccine field study.

**Group 4:** Community members

The successful HIV/AIDS campaigns by the Ministry of Public Health and others have resulted in the decline in HIV incidence. Therefore, an AIDS vaccine field study required a larger group of volunteers. This requirement made the study of the overall population of a single community feasible. In 1999, a field study was conducted in Sattahip District, Chonburi Province, in parallel with a study in family planning clinics. It was found that the HIV incidence in the 20-29-year-old age group was 0.7 per 100 person-year, and the follow-up rate was as high as 81% at the end of a year. From this study, it was concluded that this population group was suitable for an AIDS vaccine field study.

The research team chose a group of 20-29-year-olds in Chonburi and Rayong provinces as vaccine-study subjects.

**Step 3:** *AIDS vaccine field study*

In 2001, TAVEG and the Ministry of Public Health joined forces to prepare for an AIDS vaccine field study. The study started in 2003 in Chonburi and Rayong provinces with 16, 000 volunteers and was estimated to take five years to complete.



**Laboratory equipment for AIDS vaccine research and development at the Armed Forces Research Institute of Medical Sciences.**

## **Part 6: The role of the RTA in national and international coordination and collaboration on HIV/AIDS**

The Armed Forces Research Institute of Medical Sciences supervises collaboration between the RTA Medical Department and the US Army by Walter Reed Army Institute of Research and has been operating for over 40 years. The joint research project for HIV/AIDS was called Thai-US Army HIV Research Collaboration (Thai-US Army HRC).

Thai-US Army HRC extended its cooperation to other national organizations, as follows:

- The Research Institute for Health Sciences, Chiang Mai University, for vaccine study Phases I & II.
- The Faculty of Tropical Medicine, Mahidol University, for vaccine study Phases I & II.
- The Faculty of Medicine, Siriraj Hospital, Mahidol University, for vaccine study Phases I & II.
- The Ministry of Public Health
  - A joint research project with the Venereal Disease Division (as described in Part 5)
  - The Department of Communicable Disease Control, in collaboration with the AIDS Division on HIV screening among RTA conscripts
  - AIDS vaccine field study

These collaborative efforts have resulted in the development of a research system with personnel and laboratory facilities of international standards. Many research results have been presented at various international conferences.



## CONCLUSION

The achievements of the Royal Thai Army (RTA) have been internationally recognized and include:

1. Formulation of clear and appropriate policy on HIV prevention in the RTA.
2. Establishment of an epidemiological database, which is widely recognized as a means of measuring the situation and trends and evaluating the success of national HIV/AIDS programmes.
3. Development of HIV-prevention models suitable for RTA settings.
4. Contribution to the alleviation of HIV/AIDS-related illnesses in the general public.
5. Development of fundamental structures for clinical research of an AIDS vaccine.
6. Establishment of technical coordination and collaboration at national and international levels.

Factors contributing to the RTA's success include the following:

1. The perception of the HIV/AIDS problem as a threat to the national security.
2. Commitment of policy-makers to finding solutions to HIV/AIDS-related problems.
3. Strong organizational structure and management.
4. Implementation of effective strategies and measures.
5. Demonstration of long-term commitment by RTA.
6. Multisectoral coordination and collaboration.

Because HIV/AIDS is a long-term problem, operational obstacles relating to budgetary and personnel limitations need to be resolved for the sustainability of the RTA's programmes.

Based on its experiences in tackling HIV/AIDS, in collaborating with other organizations, the RTA notes the following four main points:

1. Promptness in situation assessment and prevention operations is vital to controlling HIV.
2. Seeing HIV/AIDS as a threat to national security was the key to Thailand's success in fighting the epidemic. It ensured decision-makers' prompt decision-making and instilled a commitment to fight HIV/AIDS.
3. Multisectoral collaboration was a crucial force behind HIV/AIDS prevention and impact alleviation in Thailand.
4. The RTA resources have been effectively and efficiently utilized in HIV/AIDS prevention and impact-alleviation campaigns, with relevancy, feasibility and ethical soundness, and in line with the national HIV/AIDS policy.

The RTA's HIV/AIDS prevention and impact-alleviation programmes have met the following criteria:

## 1. Effectiveness

- HIV surveillance among Thai male conscripts is a valuable activity, providing a long-term overview of the situation and trends of HIV for sustainable evaluation. It provides useful data for the RTA, the country, and the international community.
- HIV/AIDS prevention and impact-alleviation campaigns, which aim to disseminate information at the macro and micro levels, successfully slowed down HIV infection in the RTA. The KAP (knowledge, attitude and practice) survey works effectively within the organizational structure of the RTA and helps conscripts to curb their risky behaviours. The results are lower rates of HIV infection, of sexually transmitted infections and of drug use in the RTA. These models can be applied to other high-risk groups.
- Collaborative research on HIV/AIDS have revealed many findings, including the trends and magnitude of the HIV/AIDS epidemic, the distribution of HIV subtypes in the country, and an understanding of the natural course of HIV disease; it also helped in the preparation of the AIDS vaccine field study carried out in 2003.

## 2. Efficiency

- Collaboration between RTA and other organizations (including sharing of personnel and resources), provides a good example of a multisectoral approach.
- Standards of efficiency in managing HIV screening of Thai male conscripts needs to be improved. The advantage of the centralization strategy, with Bangkok as headquarters, is its convenience of information flow, but the disadvantage is the delay in obtaining laboratory test results, as blood samples have to be sent to Bangkok and there is a continuous backlog.
- The campaigns to reduce risky behaviour among conscripts are in line with the national '100% Condom Use Programme'. The campaigns encourage the use of condoms and educate individuals on their correct usage. The 100% condom use programme, which has been implemented nationwide, requires that military units participate in efforts to support such national policies. The RTA's campaigns and the 100% condom use programme are mutually supportive, resulting in a more effective and more efficient response to HIV/AIDS.
- Many RTA research projects on HIV/AIDS have benefited from expertise, training and funding from various sources nationally and internationally. This indicates efficient resource management for maximum benefit.



### 3. Relevance

- The RTA HIV-prevention-and-control operation is an effective solution-oriented strategy. Military personnel are clearly one of the target groups for HIV infection because they are posted away from home. Many international organizations have tried to motivate the military sector of all countries to take part in the HIV/AIDS response, but with limited success. HIV/AIDS issues are largely viewed as health problems, and considered to be the responsibility of the health ministry.

The RTA's response greatly contributed to the success of the HIV-prevention campaign in Thailand. Moreover, the prevention of HIV in the RTA is a measure designed to increase the strength and security of the country.

- HIV screening of Thai male conscripts is a means of monitoring the trends of the HIV/AIDS epidemic in Thailand. Moreover, following up on HIV-infected personnel leads to a better understand of the natural course of the disease and supports preventive AIDS vaccine research.
- Besides HIV/AIDS, Thailand has other health-related behavioural problems such as drug addiction, nutrition and lack of exercise, which also require effective health-care measures. Measures adopted by the RTA in the response to HIV/AIDS, such as the KAP survey, can be easily adapted when addressing other health problems requiring behavioural change.
- The RTA policy of providing treatment and care for people living with HIV/AIDS has enabled the patients to live well without becoming a burden to society. This also helps in prevention and control of the disease.
- The RTA policy of screening personnel to be posted in peacekeeping forces overseas helps ensure the safety of other countries.

### 4. Sustainability

- The surveillance of HIV infection among RTA conscripts has been carried out for over 10 years in cooperation with the Ministry of Public Health, in full confidence of its beneficial application. The operation has been continuously improved to increase effectiveness.
- As a result of the economic crisis, HIV-prevention-and-control campaigns, using KAP surveys, which were backed by the RTA hierarchical organization, were not run throughout the RTA. However, similar HIV/AIDS operations were carried out in schools and later on adapted to deal with other problems threatening national security, such as drug addiction. Planning and guidelines for KAP surveys can be adjusted to suit immediate problems and needs. The trained group project leaders who are released from duty can still give the

benefit of their knowledge and experience to others at the private or community level. They can also form networks to develop fundamental structures and sustainable operations.

- The development of HIV/AIDS research in the RTA, including the study of the epidemiology and microbiology of HIV, as well as the preparation for vaccine research in all phases (I, II & III) has created a wealth of knowledge and experience, which form a valuable foundation for further applications to other works.

### 5. Ethical soundness

- The monitoring of HIV/AIDS among RTA conscripts is aimed at identifying those infected needing proper care and preventative measures. It is especially important for those in field operations or in an overseas peacekeeping force. There is now no policy of immediate dismissal based on one's seropositive status. Counselling is provided in all RTA hospitals and the patient's personal information is kept strictly confidential.
- The implementation of an HIV-prevention-and-control policy in the RTA has been officially approved. (Any major policy must be approved by the National Committee on AIDS Prevention and Alleviation.)
- Research projects must be sound in their structure and ethical approach in order to yield valid results. All RTA HIV/AIDS research projects have been approved and supervised by appropriate research and ethics committees at national and international levels.

In summary, the RTA's HIV-prevention-and-control operations have played a significant role in reducing the HIV/AIDS epidemic and related problems in Thailand. Its approach is considered to have been successful at the national level. HIV/AIDS, however, still poses many problems for Thailand and the response must be sustained by all sectors of Thai society.



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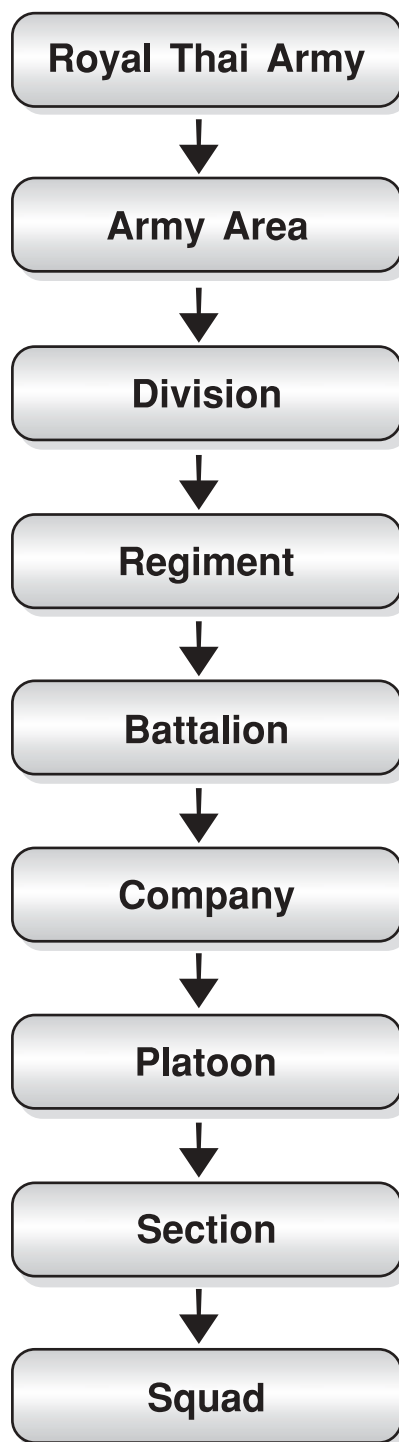


# ANNEX

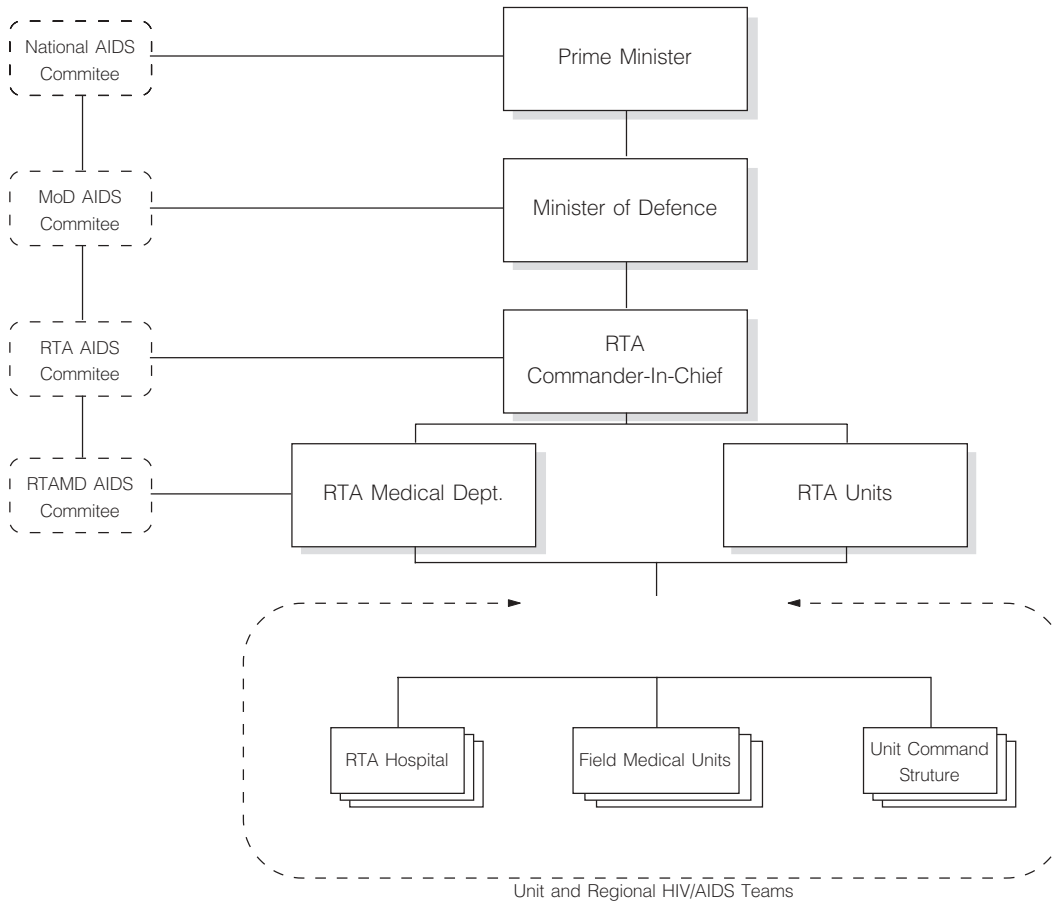
## Chart 1.

### Timeline of HIV/AIDS events in Thailand 1984-2003

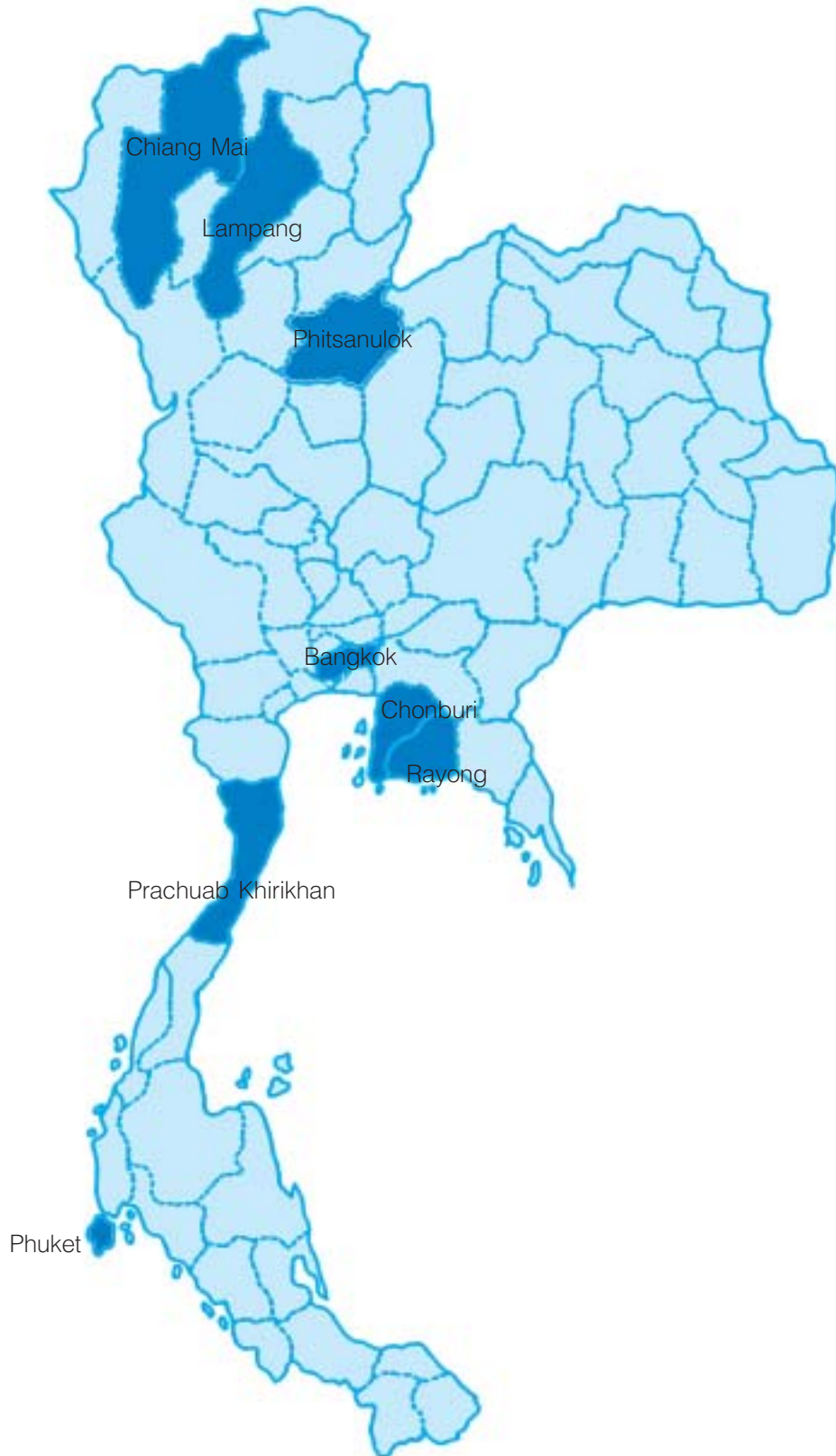
Year	Event
1984	◆
1985	First AIDS case found in Thailand. AIDS declared a reportable disease
1986	◆
1987	◆ First HIV report in RTA personnel
1988	Formation of National AIDS Committee
1989	Formation of RTA/MID AIDS committee
1990	Formation of National AIDS Committee
1991	◆ HIV found in all surveillance groups except ANC
1992	◆ Epidemiological and risk factor investigations started
1993	HIV testing for all new conscripts entering the RTA
1994	HIV found in ANC serosurveillance
1995	MoD AIDS Committee Formation
1996	RTA AIDS Committee Formation
1997	RTA-wide Implementation of Targeted Behavioural Interventions
1998	Behavioural surveillance in collaboration with MoPH
1999	
2000	
2001	
2002	
2003	

**Chart 2. Royal Thai Army organization**

### Chart 3. Royal Thai Army HIV/AIDS organization



# Map of Thailand



This Case Study focuses on the experiences of the Royal Thai Army (RTA) in HIV/AIDS prevention and education over the past decade and a half. Many lessons can be learned from the RTA's experiences with HIV/AIDS prevention and control with its own conscripts but also its significant contribution to the response to HIV/AIDS in Thailand.

This Case Study documents the processes and strategies the RTA has used to achieve a sustained decline in HIV prevalence rate within its personnel, and outlines the HIV/AIDS policies, programmes, and medical research and development used to achieve these results.

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