

# 11. Status of STD Screening, Diagnosis and Treatment in Thailand

Kobchitt Limpaphayom, MD  
Associate Professor of Obstetrics  
and Gynecology  
Chulalongkorn University  
Bangkok, Thailand

## Country Profile

Thailand is an agricultural country in Southeast Asia with an area of 513,115 square kilometers. There are 76 provinces. The population in 1994 was 58.33 million with a population density of 112.62 per square kilometer. About 20 percent of the population live in urban areas. The population growth rate is approximately 1.2 per annum. The trend of population growth indicates that the country is growing more urbanized with an increased proportion of working and elderly and a decrease in the dependency ratio.

Thailand has experienced a period of rapid economic growth since the 1960s. Much of the growth in the Thai economy has emanated from the manufacturing industry, with particular and continued emphasis on export-led growth. The share of agriculture had fallen from about 40 percent in 1960 to 20 percent in 1987, while industry's share increased from 14 percent to 21 percent during the same period. On the whole, the recent rapid economic growth and structural changes have enabled Thailand to double its per capita income over the last two decades.

The Ministry of Public Health (MOPH) has taken major responsibility for the delivery of health services in Thailand. In addition, other ministries such as the Ministry of University, Ministry of Interior and Ministry of Defense as well as the private sector also provide health services.

## Introduction

Sexually transmitted diseases have affected millions of people with incurable illnesses having such long-term consequences as pelvic inflammatory disease, tubal occlusion leading to infertility and ectopic pregnancy, chronic pelvic pain and cervical cancer. Other major long-term sequelae are neonatal morbidity and mortality caused by transmission of STDs during pregnancy and childbirth. Most important is the epidemiologic synergy of STDs with HIV. The most effective way to reduce the adverse consequences of STDs is by prevention or management of the infection through proper screening, diagnosis and treatment.

In Thailand, STDs have been a major public health problem since 1967 (**Figure 11-1**), with the increasing rate paralleling the growth and economic development of the country. The control of STDs is the responsibility of the Department of Communicable Diseases Control through the Venereal Diseases (VD) Division and has been the focus of a national program for more than 25 years. The VD Division provides STD services and facilities through 12 regional centers and 8 clinics in Bangkok. At the provincial level, VD Clinics operate throughout the country under the administration of the office of the Permanent Secretary with technical support from the VD Division. Since 1991 STD services have been offered at the district level and all districts will be covered by 1995. The integration of STD services at selected primary health care centers was implemented in mid-1994. **Table 11-2** shows a breakdown of the different types of STDs for 1990–1992.

Figure 11-1. Total STDs in Thailand, 1967–1992

Cases per 1000 population

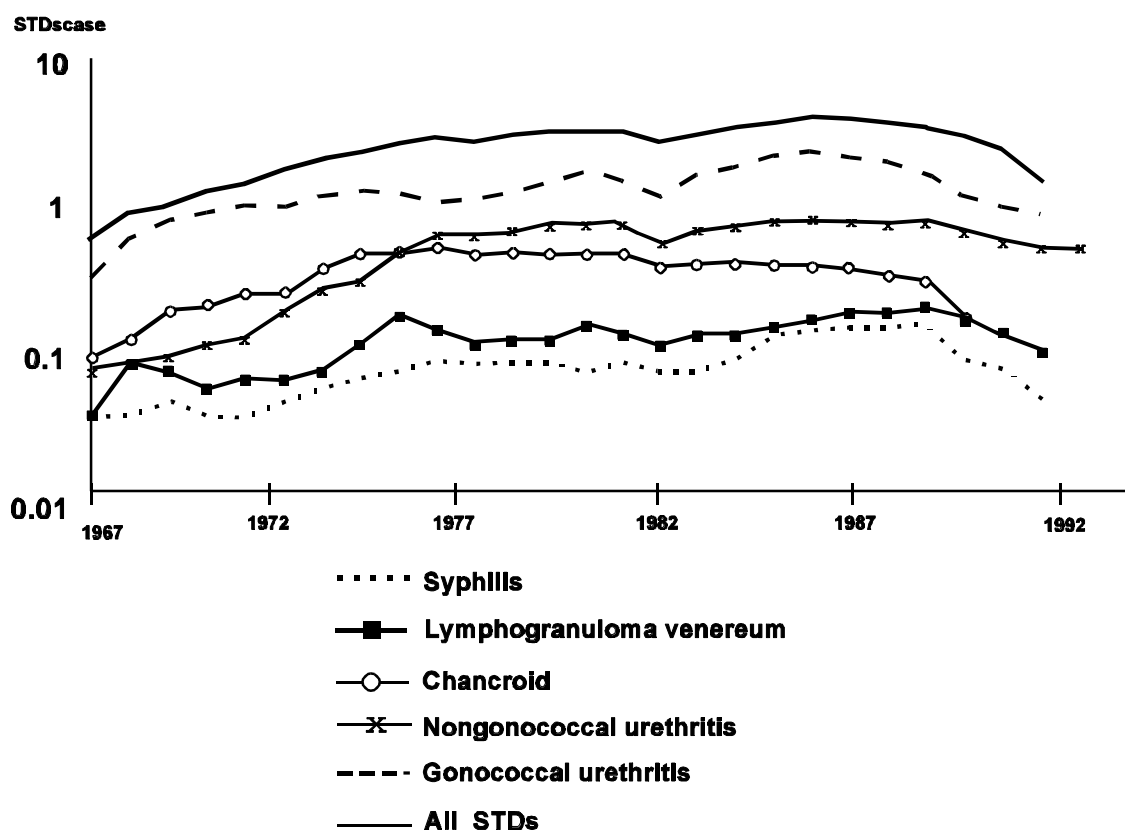


Table 11-1. Percentage of Different Types of STDs, 1990–1992

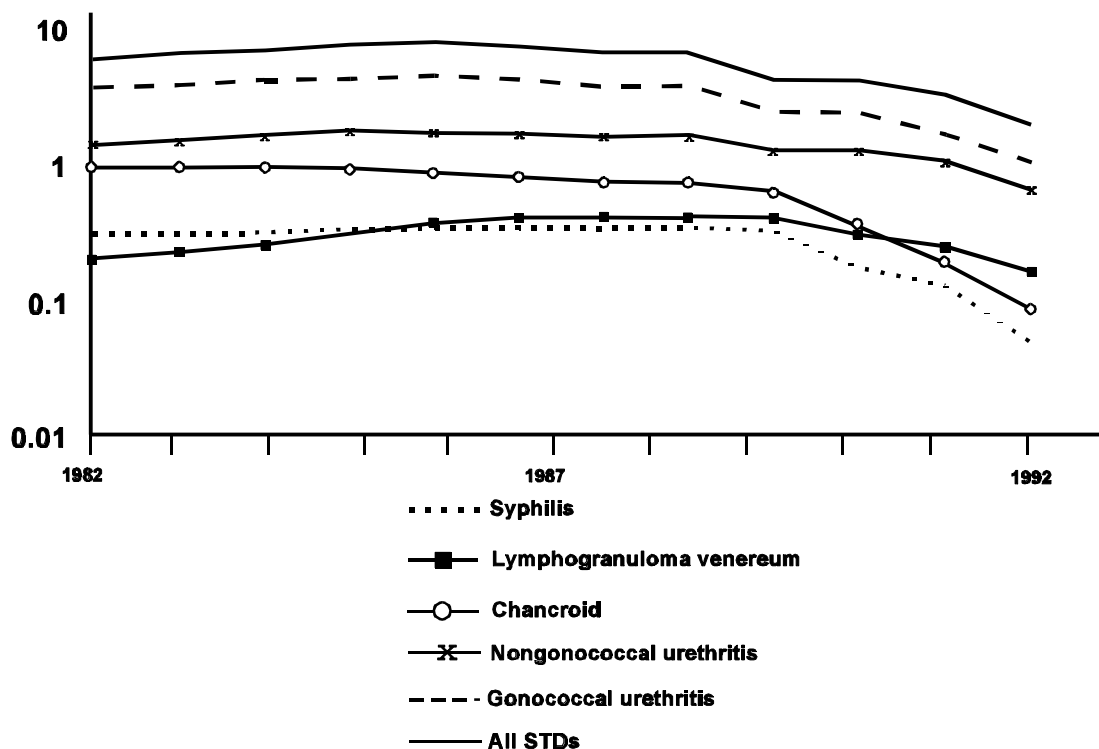
TYPES OF STDs	1990		1991		1992	
	N	%	N	%	N	%
Syphilis	17,168	6.81	12,429	6.83	9,861	8.23
Gonococcal	133,615	52.97	93,000	51.09	62,457	52.16
Soft chancre	19,610	7.77	12,374	6.80	5,468	4.57
LGV	9,968	3.95	6,860	3.77	2,840	2.37
Bubo	-	-	-	-	-	-
Non-GC	71,902	28.50	57,361	31.51	39,126	32.67
TOTAL	252,263	100.00	182,024	100.00	119,752	100.00

## STDs in Thailand

There was a rapid increase in cases of STDs in the early 1980s due to rapid socioeconomic development, enormous industrialization, migration from rural to urban areas, changing sexual behavior and expansion of the commercial sex industry. The first HIV infection in Thailand was reported in 1984. The resulting mass media communication campaign for prevention of HIV infection caused a decline in **all** type of STDs. In 1986, the incidence of STDs was 7.85 per 1000; by 1992, the incidence had decreased to 2.07 per 1000 (**Figure 11-2**).

Figure 11-2. Rate of STDs per 1000 Population

Cases per 1000 population



The first HIV cases were reported in homosexuals; it then spread to IV drug users; to female and male commercial sex workers; then to heterosexual males; and finally to their families. **Figure 11-3** shows the trend in risk factors for HIV infection between 1984 and 1995. There was a 4.5-fold increase in the incidence of AIDS between 1990 and 1992 (**Figure 11-4**), primarily affecting the 15–49 age working group. In the HIV-infected group, 95.45 percent were found to have a STD also. Those who earn their living as commercial sex workers are most affected, followed by the low-income labor group. The implication of this statistic is that HIV infection occurs at the same time as STD infection.

Figure 11-3. Risk Factors and HIV Infection in Thailand, 1984–February 1995

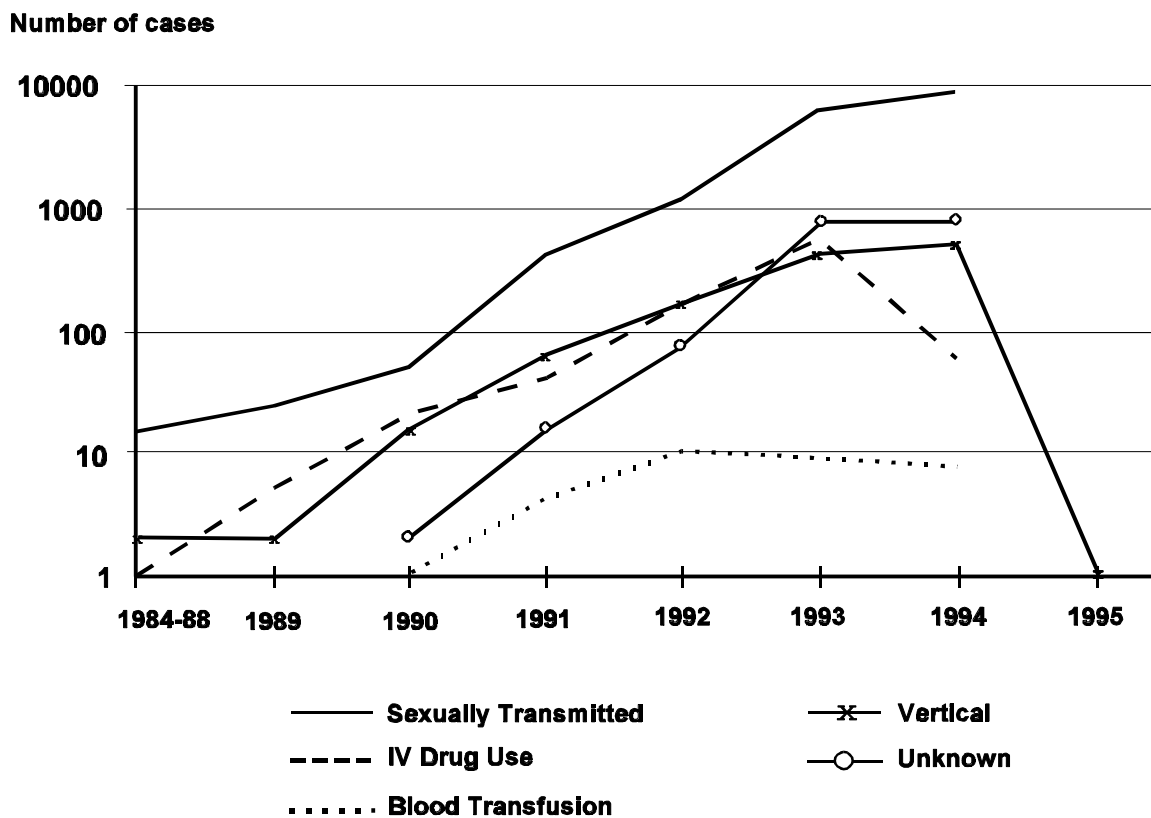
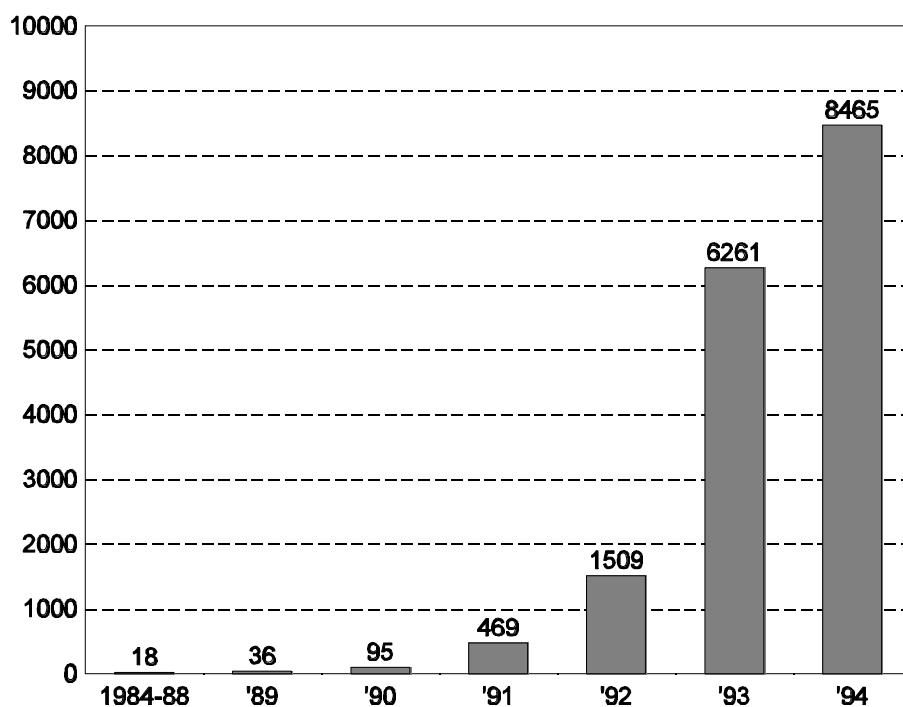


Figure 11-4. AIDS Cases in Thailand, 1984–1994



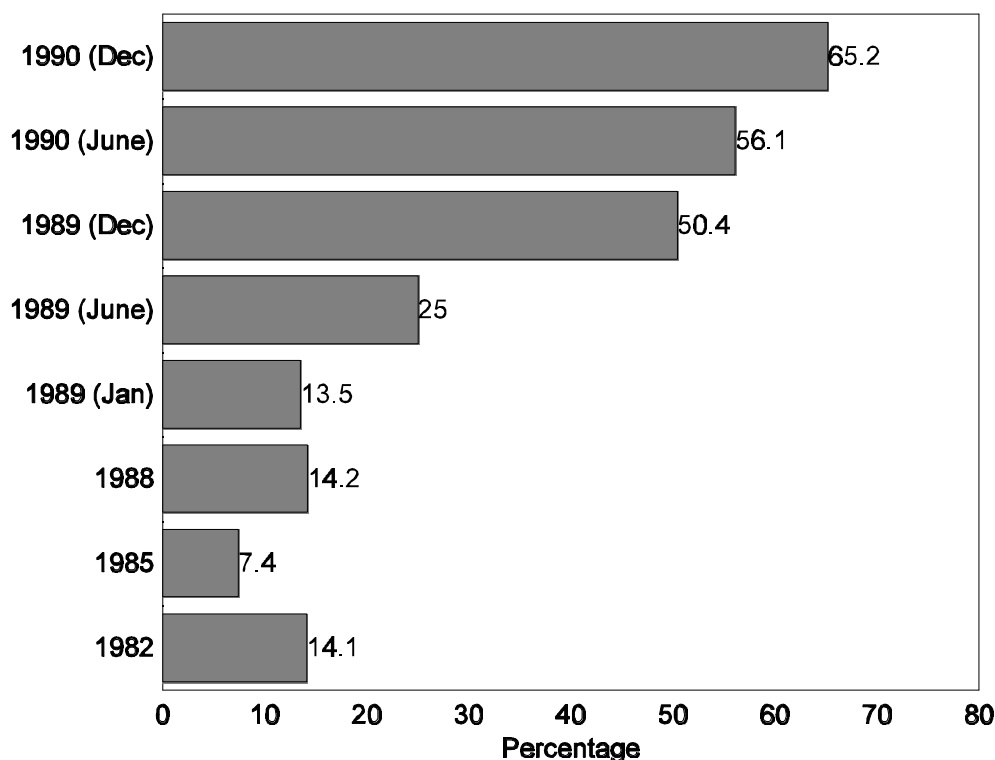
## STD Screening, Diagnosis and Treatment

Preventing infection is the most effective way to reduce the adverse consequences of STDs. The estimated total number of people newly infected with STDs is declining in Thailand. Gonococcal and non-gonococcal infection continues to have the highest incidence, possibly due to drug resistant strains and improper treatment regimens. There has been a marked decline in syphilis (5–6 percent of all STDs). At Chulalongkorn University Hospital, the incidence was 3 percent in 1982, 2.1 percent in 1985 and 1.4 percent in 1992.

STD prevention and control activities focus on:

- **Case finding by**
  - serological testing for syphilis and routine STD screening among high-risk groups as well as the general population
  - offering premarital and prenatal VDRL, RPR test and FTA-ABS or TPHA confirming test
  - VDRL screening among high school students, military conscripts, commercial sex workers and all STD clients
  - routine culture for *N.gonorrhoeae* among commercial sex workers and all STD clients
- **Case management.** Diagnostic methods and treatment guidelines have been well established and distributed to all STD facilities including both government and private sector services. Routine diagnostic tests such as RPR, VDRL, Gram's stain, culture media for gonorrhea, as well as a simplified manual, are supplied for government facilities. Treatment guidelines are routinely updated.
- **Contact tracing.** Partner notification or contact tracing has been well established in Thailand for more than 20 years. Primary or secondary contacts are named by the index patient. With the network of STD services throughout the country, the contacts about whom full information is obtained can always be traced.
- **Health promotion and counseling** Positive health practices, safer sex and condom use have been well promoted (**Figure 11-5**). An intensive program for 100 percent condom use in brothels has been in place since 1989. Mass education through outreach programs for the general population as well as high-risk groups has been done routinely. STD counseling is currently being implemented at all levels of services through the primary health care system.
- **Control potential source of STD infection** A survey of commercial sex workers is conducted twice per year. They are asked to have routine checkups at least once every 2 weeks. Serology screening for syphilis is routinely done every 3 months.

Figure 11-5. Condom Use in Thailand Brothels, 1982–1990



## Program Management

The central VD division, regional VD center and university hospital clinics plan the provision of STD services. Monitoring and evaluation are conducted every 6 months. The indicators for evaluation include:

- Number of blood donors screened/treated
- Number of patients diagnosed/treated according to guidelines
- Number of contacts named by the patients and number successfully traced
- Number of commercial sex workers routinely examined and number of all commercial sex workers

In the Chulalongkorn University FP Clinic, counseling of patients with STDs is focused on preventing new infection, increasing compliance with treatment and followup and offering patients guidance for discussion with their partners. To prevent both reinfection and spread of disease through the community, contact tracing using STD caseworkers and patient referral has been expanded. As part of this effort, all family planning professionals are being trained in partner notification skills.