

# Report of HIV Situation among Migrant Workers in Thailand

Bureau of Epidemiology  
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## **Preface**

In 2009, the Global Fund to Fight AIDS, TB and Malaria supported a program on HIV prevention among most at risk populations (MARPs) by promoting integrated outreach and networking aiming to scale up provision of prevention services to female sex workers (FSW), men who have Sex with men (MSM), injecting drug users (IDU) and migrant workers (MW). The Bureau of Epidemiology has developed the Integrated Biological and Behavioral Surveillance system among migrant workers for the first time to understand HIV situation among this population. It is used as a means to monitor HIV epidemic and to evaluate the program. In 2010, the first round of the surveillance survey was conducted and repeated again as the second round in 2012.

This report includes the results from both rounds but the analysis in certain dimensions are yet to be included to yield comprehensiveness of migrant situation, which will be addressed in the next round of surveillance survey. The Bureau of Epidemiology would like to express our appreciation to all partners and stakeholders that have supported the surveillance system to maximize its effectiveness and to achieve the objectives.

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## Introduction

Currently, Thailand's economic development results in an increasing trend of expansion while the country has also been experiencing labor force shortage in the industrial and the agricultural sectors during the past decade. This is due to declining population growth in Thailand, resulting that the new labor force has decreased while unemployment is increasing. The labor force from the agricultural sector have migrated to the industrial and service sector. This has led to the situation that the labor force which are mostly unskilled in the locally agricultural sector are scarce. Hence, a solution to labor shortage is to allow migrant workers from neighboring countries to replace those who have moved to other sectors. Also, there are certain types of work that are not considered by Thais because they are hard work, dirty and returned with low benefits such as labor force in the fishery industry, construction and labor force in the rubber plantation, etc. The government has a policy to regularize illegal migrants by making a Memorandum of Understanding (MOU) with 3 countries, including Lao People's Democratic Republic, Cambodia and the Union of Myanmar (or formerly known as Burma), giving opportunities to labor workers from these countries to come to work in Thailand. This is a bilateral procedure. Those who wish to work in Thailand must have valid passports and work permits in compliance with the governments of both countries. At the same time, the Thai government has offered opportunities to those who have already entered the country illegally to participate in the nationality validation process, which is done by the country of origin. Then, they will receive passports while work permits will be issued by the Thai government in case that their applications meet the criteria to get a work permit for a foreign worker. Currently, the size and numbers of international migrants are unknown and any concerned organizations cannot confirm either. However, the National Security Council has estimated that the number of both documented and undocumented migrant labors is 2.5 millions (Source: National Security Council document, retrieved in August 2009). As such, the number of international migrant workers are considerably increasing in the Thai society and this may lead to an increasing number of health issues such as Elephantiasis, Malaria and AIDS. This will affect the Thai public health system.

In 2010, the Department of Disease Control Ministry of Public Health was supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) to implement the project on "Comprehensive HIV-Prevention Among Most at risk population by Promoting Integrated Outreach and Networking (CHAMPION) (AIDS Project Round 8) to support the national program from the regular budget. The Bureau of Epidemiology has been assigned to conduct surveillance surveys among international migrant workers to evaluate the project to ensure the program coverage regardless they are documented or undocumented. These surveillance surveys apply IBBS by HIV testing and urine specimens screening for STIs, which is integrated with behavioral questions on HIV and STIs. This will better explain the results from the surveillance of HIV and STI prevalence from only one method.

## **Overall objective**

To investigate the data on HIV and STI prevalence and data on risks associated with HIV at the national and provincial levels that will be relevant to the prevention program design, monitoring and evaluation of AIDS response.

## **Specific objectives**

1. To monitor HIV and STI prevalence among international migrant workers
2. To monitor behavioral changes associated with HIV and STI among migrant workers
3. To examine factors effecting behavioral changes associated with HIV and STIs

## **Population under this surveillance survey**

International migrant workers aged between 15 – 49 years of Laotian, Cambodian and Burmese who are currently working in Thailand. The eligibility criteria of the participants are as follows:

1. Participants will be identified whether or not they are qualified as follows:
  - 1.1 Inclusion criteria
    - 1.1.1 Registered migrant workers, who have and do not have work permits, and both documented and undocumented
    - 1.1.2 Migrant workers from 3 countries, including the Union of Myanmar, Lao People’s Democratic Republic and the Royal Kingdom of Cambodia
    - 1.1.3 Having resided in Thailand not less than 6 months
    - 1.1.4 Work in one of the 5 occupational sectors, including fishery, continuous fishery, construction, agriculture and factory.
    - 1.1.5 Consent to give an interview
  - 1.2 Exclusion criteria
    - 1.2.1 Commuting migrant workers, who do not reside in Thailand and daily come across borders to do temporary jobs.
    - 1.2.2 Non- Thai citizens, Stateless Thai citizens, ethnic minorities and tribes
    - 1.2.3 Not consent to give an interview
    - 1.2.4 Migrants with hearing impairment

## **Study sites**

The survey was conducted in 10 provinces, including Chiang Mai, Tak, NakornPanom, UbonRatchathani, SamutPrakarn, Kanchanburi, Chonburi, Trat, Trang and Songkhla.

## **Sample size**

The sample size at the national level was estimated at 2,400 – 2,800 cases that were collected from 10 provinces. The sample size was calculated from the following formula:

$$n_p = \frac{N Z^2 P(1-P)}{N e^2 + Z^2 P(1-P)}$$

$n$  = sample size  
 $Z_{\alpha}$  = Z-value at Type I Error at  $\alpha$  ( $\alpha = 0.05$ ,  $Z = 1.96$ )  
 $P$  = proportion of potentially eligible participants – referring to HIV prevalence among migrant workers in each location  
 $N$  = number of migrant workers within 3 nationalities according to the Cabinet resolution dated in April 2012 and estimated numbers of migrant workers in each province  
 $e$  = confidence interval (same value as  $P$ )

### **Sampling method**

The Bureau of Epidemiology suggested the application of a probability sampling in this IBBS among migrant workers at the first stage. Provinces should not apply non-probability sampling at the first stage. Each provincial public health office made a list of the work place venues, where there are migrant workers by collaborating with the Provincial Employment Office for work places, and with local NGOs for the communities where migrant workers live. Then, the lists were handed over to the Bureau of Epidemiology to randomly select the venues to reduce bias.

### **Data collection tools**

1. Questionnaires to investigate behavior associated with HIV infection classified by nationalities, consisting of the following parts:

|   |              |
|---|--------------|
| Part 1 General information                                    | 15 questions |
| Part 2 Sexual behaviors and condom use                        | 22 questions |
| Part 3 Behaviors associated Drug use and alcohol              | 6 questions  |
| Part 4 Illness due to STIs and access to HCT and STI services | 22 questions |
| Part 5 HIV/AIDS service coverage                              | 4 questions  |
| Part 6 HIV knowledge and risk assessment                      | 6 questions  |

2. Specimens collection to screen for Chlamydia trachomatis and Neisseria gonorrhoea by PCR method

### **Data collection**

Collecting the data by staff of government and NGO staff including technical officers, nurses, counselors, migrant health officers, migrant health volunteers. The migrant health volunteers helped functioning as an interpreter during the interview with questionnaire. Then, blood and urine were collected from all samples.

### **Data analysis**

Filled questionnaires were checked for completeness and entered data into the computer by provincial public health staff. The data were analyzed at the provincial level and then submitted to the Bureau of Epidemiology for the analysis at national level. Data were analyzed in response to the designated indicators by appropriate statistical methods in relation to data types.

## Survey results

### General information

Most the samples of migrant workers in the selected sites in 10 provinces, 52.9% were women and aged 20 – 24 years at 21.8% and followed by 25 – 29 years at 19.78%. It was found more than half of the samples were Burmese at 55.9% and factory workers is the highest at 54.3%. (See Table 1)

Table 1: Socio-demographic characteristic of migrant workers in Thailand in 2012 (N=2,517)

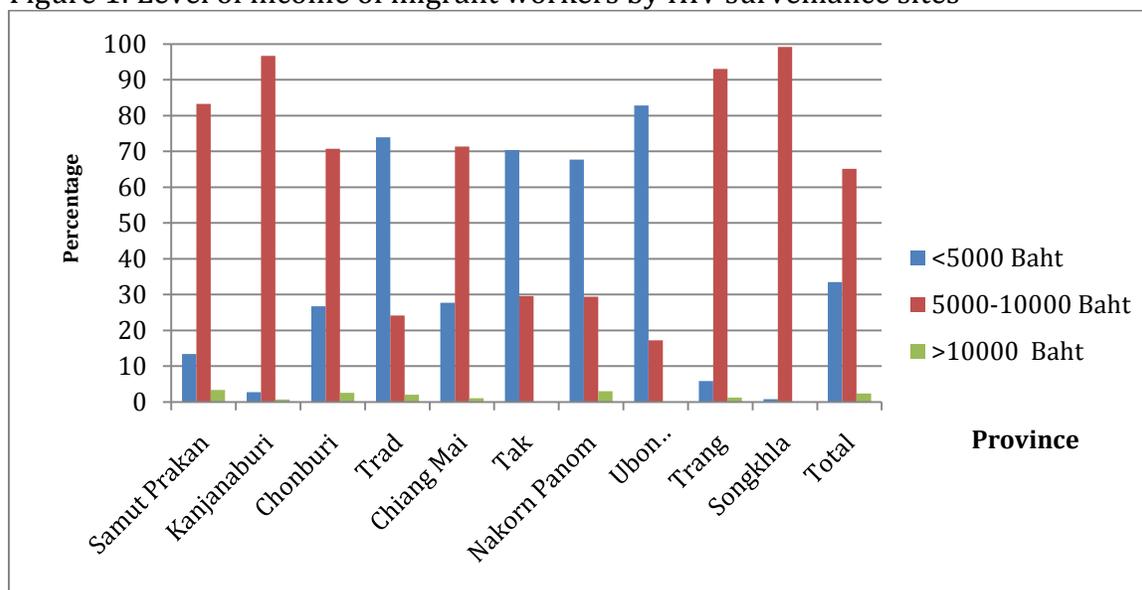
| <b>Socio-demographic characteristics</b> | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| <b>Sex</b>                               |               |                   |
| Female                                   | 1,187         | 52.9              |
| Male                                     | 1,330         | 47.1              |
| <b>Age group (years)</b>                 |               |                   |
| 15 – 19                                  | 285           | 11.34             |
| 20 – 24                                  | 553           | 21.85             |
| 25 – 29                                  | 497           | 19.78             |
| 30 – 34                                  | 435           | 17.31             |
| 35 – 39                                  | 309           | 12.30             |
| 40 – 44                                  | 214           | 8.52              |
| 45 – 49                                  | 224           | 8.91              |
| <b>Total</b>                             | <b>2,517</b>  | <b>100</b>        |

Table 1 (continued): Socio-demographic characteristic of migrant workers

| <b>Socio-demographic characteristics</b> | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| <b>Nationality</b>                       |               |                   |
| Burmese                                  | 1,405         | 55.9              |
| Laotian                                  | 741           | 29.4              |
| Cambodian                                | 371           | 14.7              |
| <b>Occupations</b>                       |               |                   |
| Fishery                                  | 130           | 5.17              |
| Continuous fishery                       | 369           | 14.67             |
| Agriculturist                            | 288           | 11.45             |
| Construction workers                     | 292           | 11.61             |
| Factory workers                          | 1,366         | 54.31             |
| Others                                   | 70            | 2.78              |

More than 80 % of migrant workers' incomeranged from 5,000 to 10,000 Baht/month, those were in Songkhla, Kanjanaburi, Trang and Samut Prakan.The provinces where income ranged less than5,000 Baht/month includes Trat, Tak and Ubon Ratchathani. (See Figure 1)

Figure 1: Level of income of migrant workers by HIV surveillanc sites



Comparison of HIV prevalence in selected sites in 2010 and 2012, found that most of selected sites were decreased trend of HIV infections but NakornPanom and Chonburi were increased trend from 2010.Trat province was the highest of HIV prevalence at 2.2%.(See Table 2)

Table 2: HIV prevalence in selected sites in 2010 and 2012

| Selected province | 2010 |        |             | 2012 |        |             |
|-------------------|------|--------|-------------|------|--------|-------------|
|                   | HIV  | Tested | %           | HIV  | Tested | %           |
| SamutPrakan       | 5    | 300    | 1.67        | 4    | 296    | 1.35        |
| Chonburi          | 2    | 300    | 0.67        | 3    | 248    | 1.21        |
| Trat              | 15   | 300    | 5.0         | 6    | 268    | 2.24        |
| Ubon              | 1    | 300    | 0.33        | 0    | 157    | 0           |
| NakonPanom        | 2    | 301    | 0.66        | 3    | 198    | 1.52        |
| Chiangmai         | 5    | 300    | 1.67        | 4    | 296    | 1.35        |
| Tak               | 1    | 300    | 0.33        | 1    | 249    | 0.40        |
| Kanchanaburi      | 4    | 300    | 1.33        | 3    | 297    | 1.01        |
| Songkhla          | 2    | 300    | 0.67        | 0    | 250    | 0           |
| Trang             | 3    | 300    | 1.0         | 0    | 258    | 0           |
| <b>Median</b>     |      |        | <b>0.84</b> |      |        | <b>1.11</b> |

HIV infections classified by nationality, it was found that the infection among Burmese migrant workers were quite stable between the 2 rounds at 1.0% while Laotian migrant workers were slightly increasing. In addition, HIV prevalence among Cambodian was decreased. (See Table 3)

Table 3: Number and percentage of migrant workers with HIV classified by nationality in 2010 and 2012

| Nationality | 2010           |      | 2012           |      |
|-------------|----------------|------|----------------|------|
|             | HIV/<br>Tested | %    | HIV/<br>Tested | %    |
| Burmese     | 22/1809        | 1.22 | 14/1405        | 1.0  |
| Cambodian   | 15/592         | 2.53 | 7/741          | 0.94 |
| Laotian     | 3/600          | 0.50 | 3/371          | 0.81 |

In terms of HIV infections classified by occupation, HIV infection is stable in the continuous fishery, higher in the agriculturist and lower in other. (See Table 4)

Table 4: Number and percentage of migrant workers with HIV classified by occupation in 2010 and 2012

| Occupation           | 2010           |      | 2012           |      |
|----------------------|----------------|------|----------------|------|
|                      | HIV/<br>Tested | %    | HIV/<br>Tested | %    |
| Fishery              | 4/204          | 1.96 | 0/130          | 0    |
| Continuous fishery   | 15/598         | 2.51 | 9/369          | 2.44 |
| Agriculturist        | 3/408          | 0.74 | 3/288          | 1.04 |
| Construction workers | 4/558          | 0.72 | 2/292          | 0.68 |
| Factory workers      | 13/1196        | 1.09 | 10/1,436       | 0.07 |
| Others               | 1/37           | 2.7  | -              | -    |

### Behavior of condom use at the latest sexual intercourse

Condom use at the latest sexual intercourse, found that using a condom in aged 15-19 years was similar to aged 20-24 years at 17%. Use of condom was the lowest in aged 40-44 years only 4.4%. Condom use with sex workers was the highest at 79.1% in 2010 and 75.6% in 2012. The lowest use of condom was found with their couple at 8.5%

Table 5: Percentage of condom use behavior at the latest sexual intercourse classified by sexual partners in 2010 and 2012

| Condom use at latest sexual intercourse | 2010 | 2012 |
|---|------|------|
|   | %    | %    |
| Spouse                                  | 6.8  | -    |
| Sex workers                             | 79.1 | 75.6 |
| Boyfriend/girlfriend                    | 37.5 | 8.5  |
| Other non-boyfriend/non-girlfriend      | 50   | 50.0 |
| Other partners                          | 12.5 | -    |

**Note:** In 2012, spouse was not separated as a category

## Knowledge of HIV and AIDS

In the Interviews knowledge of HIV/ AIDS among migrant workers in 2010 and 2012, it was found that less people can answer the questions correctly such as “Consistent condom use can prevent HIV transmission” or “HIV can be transmitted through eating food with HIV patients”. Some other answers were unchanged such as “People with HIV can look healthy and similar to normal people”. However, the number of those who had answered 5 questions correctly increased from 35% in 2010 to 39.5% in 2012.

Table 6: Percentage of Migrants workers answer the question on HIV knowledge in 2010 and 2012

| HIV Knowledge  | 2010 | 2012 |
|--|------|------|
|  | %    | %    |
| - Consistent condom use can prevent HIV transmission.            | 95.0 | 86.4 |
| - Have only one sexual partner can prevent HIV transmission.     | 82.5 | 83.2 |
| - HIV can be transmitted to person from mosquito bites.          | 57.5 | 69.1 |
| - HIV can be transmitted through eating food with HIV patients.  | 87.5 | 83.4 |
| - People with HIV can look healthy and similar to normal people. | 72.5 | 72.5 |
| Answered 5 questions correctly                                   | 35.0 | 39.5 |

HIV knowledge test among migrant workers classified by nationality, it was found that all nationalities have increasingly answered all 5 questions correctly from 2010. Cambodian was able to answer more correctly than Burmese and Loatian as indicated in Figure 2.

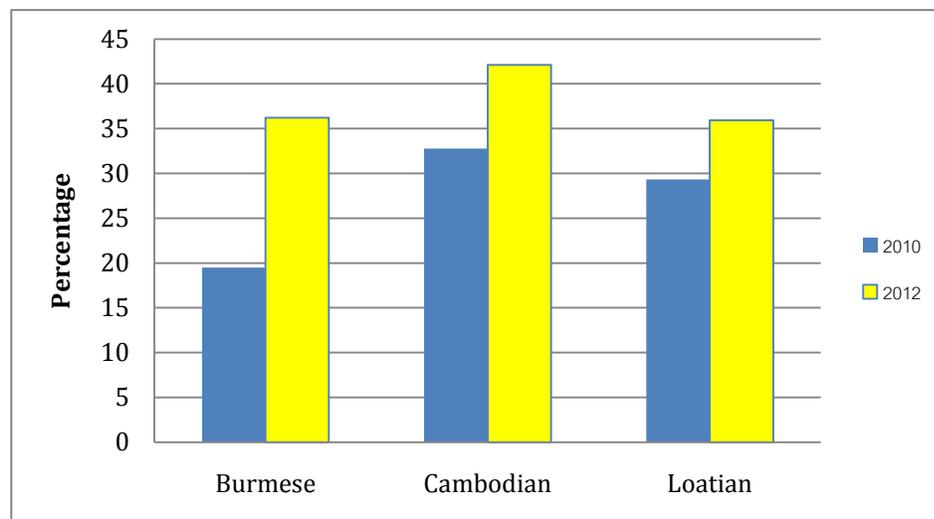


Figure 2: Percentage of migrant workers who able to answer 5 HIV knowledge related questions correctly by nationality

## **Synthesis**

The IBBS among migrant workers of 3 nationalities in 5 occupational types, including fishery, continuous fishery, construction workers, agriculturist, and factory workers was conducted in 2010 and 2012 to monitor HIV and STI prevalence and associated risk behaviors at the national and provincial levels. It was found that more than 80 % of migrant workers' income ranged from 5,000 to 10,000 Baht/month, those were in Songkhla, Kanjanaburi, Trang and Samut Prakan. The migrants who had less than 5,000 Baht/month were in Trat, Tak and Ubon Ratchathani. HIV tends to be higher among Burmese migrant workers and those working in the continuous fishery. The highest of HIV infection was found in Trat province.

In terms of condom use behaviors, behavior at the latest sexual intercourse was found rarely used a condom with boyfriend/girlfriend and used with other men or women at 50 %. When considering HIV knowledge, it was found that their knowledge about HIV had increased slightly in all 3 nationalities but were still considered relatively low. Burmese' HIV knowledge was higher than other nationalities.

According to the HIV situation mentioned, there is a need for migrant workers to access to HIV prevention services, including attitudes towards condom use and HIV knowledge etc. However, it is expected that the situation may be improved since the cabinet's resolution was approved on 15 January 2013 to permit the Ministry of Public Health to be in charge of providing all health services to all migrant workers and their dependents who are not under the social insurance scheme. Also, the policy on Health Insurance for migrants which has been rolled out since 12 August 2013. However, it is found that there are still obstacles for migrants to entry into the health insurance system. For example, many patients other than the three designated nationalities or many populations who live along borders have bought the health insurance cards while many service providers still do not understand the details about this policy since it came as an order without clearly instructions.

## **Recommendations**

1. The HIV surveillance among migrant workers were conducted in the different contexts in each province since many of them do not have legal documents and are hard-reached by the samples. It requires good and effective collaboration with stakeholders.
2. When the support of the Global Fund finishes in the future, the Ministry of Public Health has to find proper measures for surveillance, which requires sufficient support from the government
3. The current HIV prevention, care and treatment for mobile population should be developed as a whole health system including for their dependents such as improving health insurance system to appropriate with benefits and their income level. Services should be friendly accessible. Condoms, STI and HIV testing services should be free of charge or at minimal price. The government should allocate the health budget by calculating from the income taxation from the production involved by this population and they are a part of the economic development of the country.

4. Development of Drop-in Centers for migrants to ensure coordination and access to various services, including condoms, IEC materials, sports and cultural activities as the options for them to reduce risk opportunities
5. Changing attitudes towards migrant workers among health providers in certain service points which is still essential to ensure their acceptance of migrant worker co-existence.
6. Adjusting relevant health promotion activities and access to health care for vulnerable migrant workers including, youths, pregnant women, fishermen, migrant sex workers and migrant sex work clients in the areas where there is high HIV prevalence.