

# **Surveillance Report:**

**Sexual risk behaviors**

**and**

**HIV prevalence**

**Among Transgender**

**In 2014**

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## The 2014 Surveillance Results of Associated Risk Behaviors and HIV Prevalence among TG

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### Introduction

The surveillances on associated risk behaviors and HIV prevalence among Transgender: TG that are currently being implemented by the Bureau of Epidemiology (BOE), Ministry of Public Health had been extended from a study through collaboration between Thailand – U.S. CDC Collaboration (TUC), The Thai Red Cross AIDS Research Centre, and Rainbow Sky Association of Thailand. The surveillance was initiated in 2005 and Bangkok, Chiang Mai and Phuket were chosen to be pilot provinces. The 2015 surveillance reported that HIV prevalence among TG was 11.5% in Bangkok, 17.6% in Chiang Mai and 11.9% in Phuket. Based on the results, the high HIV prevalence among TG was considered to be a public health related issue. In 2007 the BOE had therefore classified TG group as one of the key populations to be monitored in the surveillance system for associated risk behavior and HIV prevalence. The surveillance was aimed at monitoring epidemic trends of HIV prevalence and HIV associated risk behaviors. In the same year of 2007, a specific surveillance was conducted in Chiang Mai which HIV prevalence was accounted for 16.8% among TG. Later, the surveillances in three provinces (Chiang Mai, Phuket and Bangkok) were re-conducted in the year of 2009.

In 2010, the surveillances were expanded to extra seven provinces and then 12 provinces had been eventually covered by the BOE. The five provinces that had been previously covered were Bangkok, Phuket, Chiang Mai, Udon Thani and Pattalung. For the additional seven provinces were Chon Buri, Ratchaburi, Pathum Thani, Nakorn Ratchasima, Khon Kaen, Ubon Ratchathani, and Songkla. For the year 2012, the surveillances were implemented in the nine provinces including Udon Thani, Phatthalung, Phuket, Chon Buri, Ratchaburi, Nakhon Ratchasima, Khon Kaen, Ubon Ratchathani and Songkla. Besides, in 2014 the surveillances were carried out in five provinces comprising of Bangkok, Phuket, Chon Buri, Ratchaburi, and Chiang Mai. With the purpose of responding to the epidemic questions at the national level and based on the current budget resource, sample size for the surveillances in 2014 had been increased while the numbers of study sites were also decreased.

### Objectives

- 1) To study HIV prevalence and HIV associated risk behaviors among TG; and
- 2) To promote access to HIV testing service among TG.

### Surveillance Methodologies

For the 2014 surveillance of associated risk behaviors and HIV prevalence among TG conducted by the BOE, serial cross-sectional survey was used among the same dynamic population. The participants selected would be qualified with all of these following conditions which include 1) Aged 15 years old and over; 2) Be Thai national; 3) Ever had oral or anal sex with men in the past 6 months; and 4) Resided in the study sites for at least one month. Through the surveillances, Venue Day Time sampling (VDTS) technique was used based on the venue list. The followings were data collection steps:

- 1) A survey and mapping of places where target group gathering were conducted;
- 2) Based on the mapping, the research team counted the numbers of target group from each place to record numbers of them coming to the study areas. Each counting must clearly specify period of time and day in a week that target group had gathered, especially the time and day that was most crowded with target group. For instance, for the 1<sup>st</sup> counting at Lumpini Park on Monday during 18.00-20.00., the numbers of target group recorded were 35 people while the 2<sup>nd</sup> count on Saturday during 22.00-24.00 had shown 50 people. Under these results, the 2<sup>nd</sup> count on Saturday during 22.00-24.00 was chosen to be the surveillance time due to the greatest numbers of target

group was recorded. To ensure accuracy in counting, TG volunteers were assigned to record the data;

- 3) The data obtained from the busiest time and day was entered into the venue list with period of time and day clearly specified. The venue was then sampled to determine the place for interviewing the target group. By sampling, the simple random technique was used with one venue being selected at each time until the required sample size had been reached. For instance, for the required sample size of 360 cases, if the first sampling from the first venue list identified as 50 people as the sample number, the surveillance would collect data from this 50 cases from the identified venue. After the sample of 50 cases had been reached of the first venue, the research team would identify another venue and another sample cases at the busiest time and follow the same procedures until 360 cases had been reached;
- 4) During data collection at the study areas, the research staff would start by informing the project details to the target groups, and also seek for their willingness to participate in the screening questionnaire process. It is important to note that only the target group who were qualified would be explained about the project details. The target group who gave their consent to participate in the project would be asked to provide additional details for the project; and
- 5) Palmtop Assisted Self –Interview (PASI) was used to facilitate the participants to give data on demographic and HIV associated risk behaviors. Then OraQuick<sup>®</sup> Rapid HIV Testing was conducted in order to detect for HIV Antibody from oral fluid. The appointment date for receiving the testing result was then made on the same day of the test. The result would be informed to the participants at counseling center of provincial hospital in each study site, and by the staff who received counseling training. If the result was positive, the counselor would encourage the participants to get an HIV re-test.

Data had been analyzed in order to identify percentage of prevalence rate of HIV, Chlamydia trichomatis and Neisseria gonorrhoea, condom use rate, experience of HIV test and receiving testing result, access to prevention program, and level of HIV knowledge at each study site.

In 2014, five provinces as surveillance sites included Bangkok, Phuket, Ratchaburi, Chon Buri and Chiang Mai.

## **The Surveillance Results**

The 2014 results of the five provinces where total number of samples were 916 TG had revealed that the average age of the sample was 25.1 years old (Median 24 SD 7.4). Over ninety-five percent (96.7%) of them were Buddhists. About 35.2% graduated their high school education level or vocational certificate. Almost seventy percent (69.7%) were single and the majority (28.9%) of them was currently staying with their friends. For the HIV prevalence among TG, the highest rate of HIV infection (16.5%) was found in Chon Buri while the lowest rate (7.8%) was shown in Ratchaburi province (Table 1).

**Table 1 HIV prevalence among TG by province in 2014**

Province	Number	HIV infected cases	Percentage
Bangkok	221	26	11.8
Chon Buri	164	27	16.5
Chiang Mai	150	20	13.3
Ratchaburi	230	18	7.8
Phuket	152	14	9.2

From the data, Phuket province was recorded as the province where condom use rate among TG during the last anal sex was the highest at 87.5% while the lowest rate was at Chiang Mai province at 74.8% (Table 2).

**Table 2 Percentage of condom use among TG during last anal sex by province in 2014**

Province	Number	Cases of condom used at last anal sex	Percentage
Bangkok	153	131	85.6
Chon Buri	128	108	84.4
Chiang Mai	115	86	74.8
Ratchaburi	106	83	78.3
Phuket	96	84	87.5

From the data, it was indicated that the highest rate (72%) of condom use among TG at every anal sex in the past three months was reported in Bangkok. On the other hand, Ratchaburi was the province with lowest rate (33.7%) of condom use (Table 3).

**Table 3 Percentage of condom use among TG at every anal sex in the past 3 months by**

province in 2014

Province	Number	Cases of condom used at every anal sex in the past 3 months	Percentage
Bangkok	143	103	72.0
Chon Buri	123	52	42.3
Chiang Mai	94	42	44.7
Ratchaburi	98	33	33.7
Phuket	78	50	64.1

From the data, the highest rate (55.2%) of TG who had ever received HIV test and the testing results in the past 12 months was reported in Chon Buri province while the lowest rate (7.4%) was reported in Ratchaburi (Table 4).

**Table 4 Percentage of HIV test and receiving HIV testing results among TG in the past 12 months by province in 2014**

Province	Number	Ever tested and received HIV testing result	Percentage
Bangkok	221	76	34.4
Chon Buri	163	90	55.2
Chiang Mai	150	64	42.7
Ratchaburi	230	17	7.4
Phuket	152	47	30.9

For detecting Chlamydia trichomatis (CT) from urine testing among TG, Chiang Mai province was reported the highest infection rate (5.3%) while Phuket province was indicated the lowest rate of 1.9% (Table 5).

**Table 5 Percentage of Chlamydia trichomatis infection among TG by province in 2014**

Province	Number	CT infected cases	Percentage
Bangkok	-	-	-
Chon Buri	163	8	4.9
Chiang Mai	150	8	5.3
Ratchaburi	230	8	3.5
Phuket	152	3	1.9

Remark: Urine testing for detecting CT was not conducted in Bangkok.

For detecting *Neisseria gonorrhoea* (NG) from urine testing among TG, Chiang Mai province was reported the highest infection rate (1.3%). Meanwhile, the lowest rate (0.6%) was found in Chon Buri province (Table 6).

**Table 6 Percentage of *Neisseria gonorrhoea* infection among TG by province in 2014**

Province	Number	NG infected cases	Percentage
Bangkok	-	-	-
Chon Buri	163	1	0.6
Chiang Mai	150	2	1.3
Ratchaburi	230	2	0.9
Phuket	152	1	0.6

Remark: Urine testing for detecting NG was not conducted in Bangkok.

In regard to access to prevention program among TG, 81.0% was reported as the highest rate among TG in Chon Buri while the lowest rate of 12.6% was found in Ratchaburi province (Table 7).

**Table 7 Percentage of access to prevention program among TG by province in 2014**

Province	Number	Access to Prevention Program	Percentage
Bangkok	221	109	49.3
Chon Buri	163	132	81.0
Chiang Mai	150	106	70.7
Ratchaburi	230	29	12.6
Phuket	152	89	58.6

In relation to HIV knowledge among TG based on Global AIDS Responses Progress Report (GARP) indicators, it was revealed that the majority of all five provinces provided the correct answer to question #1: 'Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?'. The highest rate of 74.7% was in Chiang Mai province while the lowest rate of 36.1% was in Ratchaburi. For question #2: 'Can a person reduce the risk of getting HIV by using a condom every time they have sex?', Chon Buri province ranked the highest score at 96.3% while the lowest score (37.4%) was reported in Ratchaburi. For question #3: 'Can a healthy-looking person have HIV?', the highest rate in providing the correct answers was from Chonburi province (80.4%) while the lowest rate (28.7%) was indicated in Ratchaburi. For question #4: 'Can a person get HIV from mosquito bites?', the province with the highest rate (88%) of correct answer was Chiang Mai while Bangkok showed the lowest rate at 72.4%. For question #5: 'Can a person get HIV by sharing food with someone who is infected?', it showed that 89.3% was the highest percentage of TG from Chiang Mai providing the correct answer to this question and 73.8% of TG in Bangkok was reported as the lowest rate. For providing correct answers to all five questions,

Ratchaburi was reported as the province with the lowest percentage (10.9%) while the highest percentage (48.0%) was in Chiang Mai (Table 8).

Province	Percentage of TG who provided correct answers					
	Q1	Q2	Q3	Q4	Q5	Q1-Q5
Bangkok	53.8	73.3	65.6	72.4	73.8	19.9
Chon Buri	74.2	96.3	80.4	79.1	84.7	43.6
Chiang Mai	74.7	94.0	78.0	88.0	89.3	48.0
Ratchaburi	36.1	37.4	28.7	84.8	84.8	10.9
Phuket	69.7	80.3	73.0	77.0	85.5	40.1

**Remark**

Q1: Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?

Q2: Can a person reduce the risk of getting HIV by using a condom every time they have sex?

Q3: Can a healthy-looking person have HIV?

Q4: Can a person get HIV from mosquito bites?

Q5: Can a person get HIV by sharing food with someone who is infected?

**Conclusion and Discussion**

From the surveillance on associated risk behaviors and HIV infection among TG implemented by the BOE under Ministry of Public Health, it was indicated that HIV prevalence among TG in 2014 in the five study provinces was higher, compared to the results reported in previous years.

The increased rate of HIV infection among TG was likely due to an increase in number of sample populations in the study provinces. However, the provinces with high prevalence rate such as Chon Buri and Chiang Mai still remained the areas with higher HIV incidence compared to the others. It was evident that an increase in number of samples had affected the HIV prevalence rate of each province.

In relation to condom use during the last anal sex among TG in Thailand, approximately 80% of the sample reported condom use as shown from the self- HIV prevention through sex. This was consistent to the surveillance results, which revealed that majority of the samples provided correct answer to the question related to the condom use. However, the condom use rate among TG was still lower compared to MSW, which might be the result of having less awareness in HIV prevention or higher trust in sexual partner among TG. However, this belief contradicted to the concept of HIV prevention.

It was also revealed that the majority of TG never had HIV test in the past year. This was concluded that the access to annual health check-up service in Thailand had not been promoted as appropriate. The annual health check-up was considered a minimum standard to be provided for TG, general population, and for those with HIV risky behaviors. Therefore, the health check-up should be expanded to cover the above mentioned groups.

For detecting *Neisseria gonorrhoeae* (NG) and *Chlamydia trichomatis* (CT) through urine test among TG, Chiang Mai was the province with the highest rate of both infections. Based on the results, it could be summarized that the STI was still a problem in Chiang Mai. Besides, STI prevention among TG was still lacking and this might lead to impact on the HIV surveillance.