# Model Development for Substance Abusing Surveillance System in Communities

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***Background:*** *There is growing evidence that the number of substance abusers have increased. Use of public health surveillance system in substance abuse at the community level is limited.*
***Objective:*** *Study and develop a suitable Model for Substance Abusing Surveillance System (MSASS) in communities.*
***Material and Method:*** *Thirty-eight volunteers, including five direct responsible officers, five local leaders, five people representatives and four university specialists participated in the development of the model. The present study utilized ten sets of database, reported on a monthly basis. These included substance abuse arrested cases, substance abuse treatment seekers, anonymous notification of drug abuse, notification of obstacles and problems of the responsible organizations and notification of substance abuse by the local community leaders. The seven approaches of the model included situational analysis, prototype design, trial test, system design, system running test, model improvement and model dissemination. The study was conducted in 47 communities in four sub-districts in Phakdichumphon District, Chaiyaphum Province.*
***Results:*** *The MSASS model application was created at the community level. The model assessed and monitored substance abuse practices of population aged 12 to 65 years and triggered prevention and control actions in communities. The five important constituents of the model were 1) organizations of substance abuse networks, 2) indicators of substance abuse situations, 3) criteria for investigation of magnitude of the problems, 4) data collection tools and 5) dissemination of information. The model comprised of six core activities (detection, registration, confirmation, reporting, analysis and feedback) and four support activities (communication through meeting and brainstorming, training, supervision and resource-provision). After one year, the authors were able to develop indicators and criteria for measuring magnitude of the substance abuse problems. The current developed MSASS was effective in terms of representativeness (93.0%), sensitivity (92.7%), timeliness (84.7%), prediction ability (84.5%), acceptability (82.5%), simplicity (82.5%) and validity (80.3%).*
***Conclusion:*** *The developed MSASS is an effective form of public health surveillance suitable for communities at a district level.*

***Keywords:*** *Model development, Surveillance system, Monitoring, Substance abuse*

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There is growing evidence that the number people that does substance abuse, particularly those at young ages, have significantly increased. The pandemic of substance abuse and its adverse effects on people are the major challenges and concerns for the government of all countries around the globe. Recent studies suggest widespread of drugs abusers, potentially at risk population and drugs traffickers worldwide, including Thailand[1,2,3,6,8,11]. With a population of over 63.8 millions in 2010, Thailand reported a large number of people who were arrested from either having substance abusive practices or involved with substance abusive trafficking in all regions of the country[2,7]. It is estimated that over 100,000 people are currently engaging in substance abuse in Thailand[2]. Based on the reported data of the Office of the Narcotic Control Board (ONCB) of Thailand, the number of treatment seekers for substance abuse increased in the hospitals and organized sectors to 114,074 cases in 2010[2]. Of which, these treatment seekers (between 12 to 65 years of aged) were employees (44.7%), unemployed persons (25.7%), agriculturalists (11.7%), students (10.3%) and self-employed persons (7.4%). The most common substances of abuse among this group of population

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were amphetamines, cannabis, inhalants and others, respectively.

As a national policy, the government of Thailand has placed substance abuse on the national agenda for the last decade. However, problems exist in implementing this government policy reducing concern and use of epidemiological situation. This lowers the prevention and control actions by the responsible sectors and staff[4]. In addition, the limited use of the public health surveillance system of substance abuse made problems related to substance abuse, an uncontrolled situation[2,4]. The importance of a public health surveillance and action in effective public health practice has been well recognized to reduce national and international threats of public health problems. The WHO has emphasized the needs to facilitate and standardize surveillance and action assessments and to include integrative strategies in the reform process targeting both national and local level since 2002[6]. Surveillance in public health was defined as the ongoing systematic collection, analysis and interpretation of outcome-specific data for use in the planning, implementation and evaluation of public health practice[9,10]. The substance abuse surveillance system in Thailand has been established since 2004. It comprised both national (for example the Office of the Narcotic Control Board) and local organizations (for example, the Provincial Substance Abuse Fighting Center and the District Substance Abuse Fighting Center)[2,4].

Since there is limited use of public health surveillance system in substance abuse at the community level in Thailand, the present research aimed to study and develop suitable substance abuse surveillance system in communities. Findings will indicate the effective model for bottom up substance abuse surveillance system suitable for communities at the district level. Consequently, reported data, information and message deriving from the surveillance model will aid in selecting appropriate solutions to prevent and control substance abusers, drug traffickers and people potentially at risk relevant to problems.

**Material and Method**

The present research and development project was carried out between April 2008 and December 2010 in 47 communities located in four sub-districts of Phakdichumphon District, Chaiyaphum Province, Northeastern Thailand. This seven-process approach began with situational analysis of step 1, followed by creating and improving the MSASS in step 2 to 6. Step 7 involved dissemination of the MSASS. Each step yielded specific and measurable outputs and outcomes that guided the next steps.

***Step 1***

Situation analysis. This step involved assessment of the current community context, substance abuse condition and status of substance abuse surveillance system and action by using secondary data sources, survey, observation, interview and meeting with those involved. This step led to finding strengths and weaknesses of the existing situation and system, as well as the key participants and stakeholders in the communities.

***Step 2***

Prototype design. This step included creation of a working committee for substance abuse surveillance system in communities with assistance of university specialists. Through the support activities such as meeting and brainstorming using information deriving from Step 1, the prototype of the MSASS was to be developed. The identification of the process-oriented action steps to achieve each specific objective was to be formulated. They included implementation indicators (sensitivity, timeliness, representativeness, predictability, validity and completeness, simplicity and acceptability), timelines, organization, or group primarily responsible for implementation, required resources, and ways to diminish potential problems.

***Step 3***

Trial test. This step focused on carrying out the process-oriented action steps developed and described in the prototype MSASS to achieve goals and objectives. This was the most critical and difficult step, and often required financial support. The activities in this step included specific outcomes and indicators that measured progressive change at the communities and the district levels. It also determined on possibilities (theoretical, administrative and political) and guidelines for modification.

***Step 4***

System design. This step involved the working committee, stakeholders and networks to critically assess the whole system of substance abuse surveillance resulting from step 3. It included improvement of the existing substance abuse surveillance system in communities and district levels. The result of this step was the developed MSASS.

***Step 5***

System run test. This step started the full implementation of the developed MSASS in an existing condition to achieve goals and objectives of the model. It allowed the working committee, stakeholders and networks to assess the effectiveness of the model and to help identify problem areas.

***Step 6***

Model improvement. This step involved modification of the MSASS and setting guidance for monitoring and evaluation of the overall reform progress of an implementation. The result of this step guided to the effectiveness of the MSASS suitable for local communities at the district level.

***Step 7***

Model dissemination. This step involved transferring of the complete MSASS for further implementation in other areas with similar social and cultural contexts.

***Research tools***

This research and development project utilized both quantitative and qualitative data collection tools. Quantitative data were collected by using ten forms of record sheets of the surveillance system, (MSASS1-MSASS10) to elicit data on substance abusers, drug traffickers and people potentially at risk. Qualitative data were obtained by using focus group discussion, meeting, and brainstorming of the working committee and networking groups and stakeholders.

***Data analysis***

Quantitative data on arrested substance abuse cases, treatment seekers, report on people potentially at risk were analyzed by using descriptive statistics such as frequency, percentage, rate, average and standard deviation.

**Results**

Phakdichumphon was a newly established (in 1993) and growing district of Chaiyaphum Province. The district comprised four sub-districts with 47 communities, nine to 14 communities per sub-district. Based on its total population of 29,254 in 2008, there were 21,722 people aged 12 to 65 years (74.3%), of which 11,016 were men and 10,706 were women with a sex ratio (man: woman) of 1.02: 1.0.

The results on situational analysis, the developed MSASS, comparison of the existing substance abusing surveillance system, and the MSASS are described below.

***Situational analysis***

Results of the present study reflected community context of Phakdichumpon District and its existing substance abuse surveillance system.

***Community context***

The present study found many people engaging in substance abuse in the areas. The number and rate of the arrested cases involving substance abuse increased from 20 to 26 cases (0.68 to 0.89 per 1,000 population) between 2007 and 2008 and to 54 cases (2.48 per 1,000 population) in 2009. About 79.6% of them were between the age of 19 and 65. They were largely agriculturalists (37.0%), waged workers (26.0%), students (18.5%), and unemployed persons (18.5%). Their most commonly used substances were amphetamines (79.6%) and cannabis (13.0%). A relatively small number was inhalants (5.6%) and *Gratom* plant (*Mitragyna speciosa*) (1.9%). Based on the 2009 reported data, there were 30 treatment seekers resulting from substance abuse in organized sectors and hospitals district (1.38 per 1,000 population).

***Existing substance abuse surveillance system***

The substance abuse surveillance system was established in 2004 in the provincial and district level under the organization entitled "The Substance Abuse Fighting Center-SAFC". This has been well recognized as consequences of the government strong policy to ward off substance abuse problems in the country in 2003. The FASC had its role and responsibility to prevent, control, ward off, and monitor substance abuse problems in the target area. At the District-SAFC, aside from a chief officer, several government officials were assigned to collaboratively work for the center alongside their main tasks. These included district administrative officer, policeman, medical doctor and nurse. Such officers participated in a meeting on a monthly basis to share their collected data on substance abuse. For example, a policeman officer took responsibility for collecting and reporting data on arrested cases involving substance abuse. Because the information generated in each meeting was mostly raw data, it limited the chances by the responsible authorities to show predictive trends of substance abuse problems in the area. In addition, the incomplete data management could impair solutions to help solve the substance abuse problems.

***The developed MSASS***

The development of the MSASS in the present study grew out from the limited management of substance abuse data generated among authorities and responsible staffs at district level. Using the seven-process approach for model development, the attributes of the developed MSASS, including system structure, mechanism of operation, and effectiveness were delineated as the followings.

***The system structure***

The structure of the developed MSASS comprised five important attributes, responsible organizations and networks, indicators of substance abuse situation, determining criteria for level of substance abuse problem, data collection and tools, and dissemination of substance abuse information.

*First, responsible organizations and networks:* The developed MSASS comprised of staff from both government and private organizations and networks to contribute in the collaborative work. There were four responsible groups: 1) Government official group, including the District Chief Officer, the District-SAFC and Damrongtham Center officers, police officers, physicians, nurses, and public health officers; 2) Community leader group, comprising heads of the sub-district and communities; 3) People representative group, which included a member of the house of representatives and the representatives of the Sub-district Administration Organizations-SAOs; and 4) Expert group, included the experts from Khon Kaen University (The *Isan* Substance Abuse Network) and Mahasarakham University (Faculty of Medicine). Each group had to either carry out substance abuse surveillance, or participate in the monthly meeting, or both. Details of the roles and activities of each responsible organization and network are shown in Table 1.

*Second, indicators of substance abuse situation:* Using database on monthly substance abuse arrested cases generated by the District Police Station, the indicators for determining substance abuse situation in communities had been modified from its original source (Office of the Narcotic Control Board). Such modified indicators were then divided into three groups, substance traffickers, substance abusers and people potential at risk.

*Group 1-Indicators of substance traffickers:* The indicators for determining substance traffickers were divided into three categories. These included indicators for production, mobility and trading of

**Table 1.** Substance abuse surveillance activities and support activities divided by the responsible organizations and networks

| Organizations/Networks | Substance abuse surveillance activities | | | | | Support activities | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Detection | Data collection | Reporting | Analyses | Feedback | Communication | Training | Super vision | Resource provision |
| District level | | | | | | | | | |
| District-SAFC included Damrongtham Center | | | | x | x | x | x | x | x |
| Police office | x | x | x | | | x | x | | |
| Hospitals | x | x | x | | | x | x | | |
| District health center | | | | | | x | x | | |
| Subdistrict level | | | | | | | | | |
| Subdistrict health center/health promotion hospitals | x | x | x | | | x | x | | |
| SAO | x | x | x | | | x | | | |
| Community leaders | x | x | x | | | x | | | |
| Schools | x | x | x | | | x | | | |
| Volunteers | x | x | x | | | | | | |

District-SAFC = district-Substance Abuse Fighting Center; SAO = subdistrict-Administration Organizations

substances or drugs. The following alarming signs were served as indicators for taking precautions on substance abuse problems in the area: 1) if there were more than 50.0% of the proofed evidences indicating that any arrested cases involved with substance/drug production; 2) if there were more than 25.0% of the proofed evidences indicating that any arrested cases involved with substance/drug mobility and 3) if there were more than 50.0% of the proofed evidences indicating that any arrested cases involved with substance/drug trading.

*Group II-Indicators of substance abusers:* The indicators for determining who were substance abusers within the arrested of the substance abusers were divided into three categories, including indicators related to consumption of substance abuse, treatment seekers and provision of follow-up for substance abusers. The following indicators served as alarming signs for taking precaution on substance abuser problems in the area: 1) having more than 0.48 per 1,000 population of substance abusers, either old or new, in the area; 2) having substance abuse treatment seekers more than 0.68 per 1,000 population of treated substance abusers, either old or new, in the area and 3) having more than 75.0% of the substance abuse arrested cases who received follow-up treatment in the area.

*Group III-Indicators of people potentially at risk*: The indicators for determining enabling factors of the people potentially at risk were divided into three categories, including proportion of people potentially at risk and existing substance abuse risk places, substance abuse behaviors and impact of substance abuse problems. The following indicators served as alarming signs for taking precaution on substance abuse problems pertaining to people potentially at risk in the area: 1) having people with substance abuse risk behaviors more than more than 1.75 per 1,000 population and 3) having those who received the impacts of substance abuse problems not 1.37 per 1,000 population.

The above indicators served as information and guidelines leading to appropriate public actions in prevention and control of substance abuse in communities at a district level.

*Third, determining criteria for level of substance abuse problem:* The problems level for drugs abuse were classified in four levels: (1) White level: no problems; (2) Green level: few problems; (3) Yellow level: problems that exceeded the criteria limit but were not severe; and (4) Red level: problems that exceeded the criteria limit and were severe.

*Fourth, data collection and tools:* There were classified in two parts as follows: (1) Records of surveillance system (MSASS1-MSASS10) was developed from the organizations of substance; and (2) Questionnaires of primary and secondary students was developed from the Office Of Narcotics Control Board.

*Fifth, dissemination of substance abuse information:* Dissemination of the information to the public and private sectors for prevention and surveillance drugs problems.

***Mechanism of the MSASS***

The developed MSASS comprised mechanism and function of three different groups of organization responsible for substance abuse surveillance activities in communities. It is the application of program computers in case detection, recording, registration, and reporting data. The MSASS utilized collaborative work with networking groups, such as government officers, local leaders, people representatives, and volunteers. The mechanisms and functions of the developed MSASS were divided into district and sub-district levels as shown in Fig. 1.

***Effectiveness of the MSASS***

The developed MSASS was tested for effectiveness after 13 months of operation (October 2008 to October 2009). Results showed that the average effectiveness scores of all criteria ranged from of the MSASS was 85.7% Surveillance system of abusing substances in communities have to be effective for system sustainability, which consisted of sensitivity, timely, representativeness, prediction, validity, simple, and acceptability. The surveillance system was tested in 13 months. The overall mean is presented in Table 2.

**Discussion**

At the beginning, the surveillance system was used to monitor problem diseases. In Thailand, a government policy started using the surveillance system for drugs abuse in 2004. However, it lacked sustainability[4]. Furthermore, the government policy focused on suppression of drugs abuse only. The present study improved sustainability of the surveillance system of drug abuse in communities by troubleshooting prevention, suppression and control drugs use. This helps define and determine the magnitude of drug problems and provide an early warning for emerging problems. The data has been

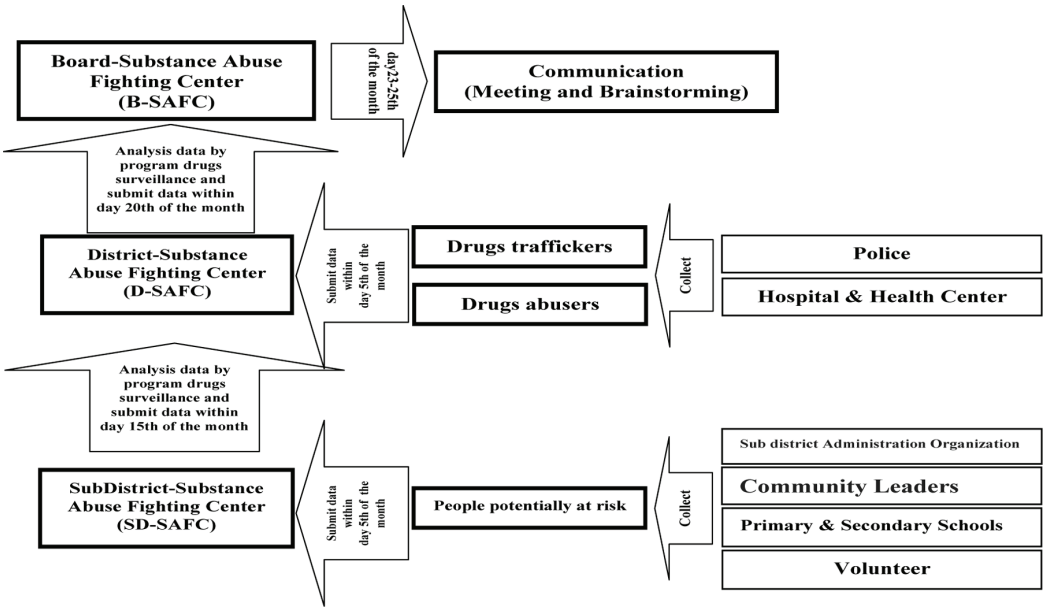


**Fig. 1** Organization, mechanisms and functions of the developed model for substance abuse surveillance system (MSASS) in communities at a district level

**Table 2.** Effectiveness of the developed MSASS in communities at a district level, October 2008-October 2009

| Effective | Months | | | | | | | | | | | | | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 (%) | 2 (%) | 3 (%) | 4 (%) | 5 (%) | 6 (%) | 7 (%) | 8 (%) | 9 (%) | 10 (%) | 11 (%) | 12 (%) | 13 (%) | |
| Sensitivity | 77.0 | 92.0 | 88.0 | 90.0 | 85.0 | 100 | 90.0 | 84.0 | 100 | 100 | 100 | 100 | 100 | 92.7 |
| Timeliness | 43.7 | 71.4 | 68.7 | 86.7 | 93.3 | 84.7 | 70.0 | 83.3 | 100 | 100 | 100 | 100 | 100 | 84.7 |
| Representativeness | 77.8 | 92.3 | 88.0 | 90.9 | 85.7 | 100 | 90.0 | 84.6 | 100 | 100 | 100 | 100 | 100 | 93.0 |
| Prediction ability | 87.0 | 57.0 | 68.0 | 66.0 | 40.0 | 100 | 90.0 | 91.0 | 100 | 100 | 100 | 100 | 100 | 84.5 |
| Validity | 70.0 | 54.0 | 62.0 | 62.0 | 37.0 | 100 | 81.0 | 78.0 | 100 | 100 | 100 | 100 | 100 | 80.3 |
| Simplicity | 56.8 | 62.7 | 65.3 | 74.3 | 65.1 | 92.3 | 75.5 | 80.6 | 100 | 100 | 100 | 100 | 100 | 82.5 |
| Acceptability | 56.8 | 62.7 | 65.3 | 74.3 | 65.1 | 92.3 | 75.5 | 80.6 | 100 | 100 | 100 | 100 | 100 | 82.5 |
| Mean | 67.0 | 70.3 | 72.1 | 77.7 | 67.3 | 95.6 | 81.7 | 83.1 | 100 | 100 | 100 | 100 | 100 | 85.7 |

gathered from police and hospital registration and records, survey of drug problems among students in primary and secondary schools including drug traffickers, drug abusers and people potentially at risk. These activities are consistent with the notion of providing information about sources of data on assessing drug abuse within and across communities[1]. The surveillance system for monitoring drug abuse has been assessed by user and its overall mean efficacy was found to be 81.9%. The Phakdichumpol model surveillance system of substance abuse has been organized in many area and other districts have since adopted the model.

## Conclusion

A surveillance system of substance abuse in communities has effectively monitored drug problems. Having a sustainable surveillance system was a key to success.


## Acknowledgement

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## Potential conflicts of interest

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**References**

1. National Institute on Drug Abuse. Assessing drug abuse within and across communities. Maryland: National Institute on Drug Abuse; 2006.
2. Office of the Narcotic Control Board. Thailand narcotic annual report 2011. The year 2010/2011 in review [Internet]. 2011 [cited 2011 Nov 12]. Available from: http://www.oncb.go.th/
3. United Nations Office on Drugs and Crime. World drug report 2011. The year 2011 in review [Internet]. 2011 [cited 2011 Nov 12]. Available from: http://www.unodc.org/
4. Office of the Narcotic Control Board. Thailand Narcotic Research 2010. The year 2010/2011 in review [Internet]. 2011 [cited 2011 Nov 12]. Available from: http://www.oncb.go.th/
5. Sloboda Z. Changing pattern of drug abuse in the United States: connecting finding from macro and micro epidemiologic studies. Subst Use Misuse 2002; 37: 1229-51.
6. World Health Organization. Guide to drug abuse epidemiology. Geneva: WHO; 2000.
7. Department of Provincial Administration. Thailand population report 2011. The year 2011 in review [Internet]. 2011 [cited 2011 Nov 12]. Available from: http://www.dopa.go.th/
8. Ingold R, Olivenstein C. Preliminary findings of an epidemiological survey of drug addiction in Paris. Bull Narc 1983; 35: 73-9.
9. Langmuir AD. The surveillance of communicable diseases of national importance. N Engl J Med 1963; 268: 182-92.
10. Thacker SB, Berkelman RL. Public health surveillance in the United States. Epidemiol Rev 1988; 10: 164-90.
11. United Nations Office on Drugs and Crime. World drug report 2010. The year 2010 in review [Internet]. 2011 [cited 2011 Nov 12]. Available from: http://www.unodc.org/

## *การพัฒนาตัวแบบระบบเฝ้าระวังสารเสพติดในชุมชน*

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***ภูมิหลัง:*** *มีหลักฐานว่ามีการขยายตัวของจำนวนปัญหาสารเสพติดเพิ่มมากขึ้นในทุกกลุ่มอายุในขณะที่ระบบที่ใช้เฝ้าระวังสุขภาพด้านสารเสพติดในชุมชนมีอยู่จำกัด ดังนั้นวัตถุประสงค์ของการศึกษาเพื่อพัฒนาตัวแบบที่เหมาะสมสำหรับเฝ้าระวังสารเสพติดในชุมชนระดับอำเภอ (MSASS)*

***วัสดุและวิธีการ:*** *ผู้มีส่วนร่วมในการร่วมพัฒนาตัวแบบจำนวน 38 คน ซึ่งได้แก่เจ้าหน้าที่ ที่รับผิดชอบงานด้านสารเสพติดโดยตรงจำนวน 24 คน ผู้นำชุมชนจำนวน 5 คน ตัวแทนภาคประชาชนจำนวน 5 คน และผู้เชี่ยวชาญจากมหาวิทยาลัยจำนวน 4 คน การศึกษาเพื่อพัฒนาตัวแบบครั้งนี้ใช้ 10 ฐานข้อมูลในการรายงานติดตามและประเมินผลเป็นประจำทุกเดือน โดยมีข้อมูลด้านการจับกุมสารเสพติด การบำบัดรักษาสารเสพติด การแจ้งเตือนปัญหาสารเสพติดโดยไม่ระบุชื่อ การแจ้งเตือนปัญหาและอุปสรรคขององค์กรที่รับผิดชอบ การแจ้งเตือนปัญหาสารเสพติดในพื้นที่โดยผู้นำชุมชนในท้องถิ่นซึ่งมีกระบวนการพัฒนาตัวแบบระบบเฝ้าระวัง 7 ขั้นตอนได้แก่ การวิเคราะห์สถานการณ์ปัจจุบัน การออกแบบตัวแบบระบบเฝ้าระวัง การทดลองตัวแบบระบบเฝ้าระวัง การออกแบบระบบเฝ้าระวังเชิงระบบในสภาพจริง การทดสอบตัวแบบระบบเฝ้าระวัง การปรับปรุงตัวแบบระบบเฝ้าระวัง และการเผยแพร่ระบบเฝ้าระวัง พื้นที่ในการศึกษาครั้งนี้มีจำนวน 47 หมู่บ้านใน 4 ตำบลของ อำเภอภักดีชุมพล จังหวัดชัยภูมิ*

***ผลการศึกษา:*** *ผลการศึกษาครั้งนี้นำไปสู่การพัฒนาระบบเฝ้าระวังสารเสพติดที่มีความเหมาะสมในระดับชุมชนโดยตัวแบบมีวัตถุประสงค์เพื่อติดตามและประเมินผล ในด้านการปฏิบัติตัวเกี่ยวกับสารเสพติด ของประชากรอายุ 12-65 ปี อีกทั้งยังเป็นการกระตุ้นเพื่อให้เกิดการป้องกันและควบคุมได้ทันท่วงที โครงสร้างของระบบเฝ้าระวังสารเสพติดมี 5 องค์ประกอบที่สำคัญ คือ 1) องค์กรเครือข่ายด้านสารเสพติด 2) ตัวบ่งชี้สถานการณ์สารเสพติด 3) เกณฑ์การตรวจสอบขนาดของปัญหา 4) เครื่องมือในการรวบรวมข้อมูล และ 5) การเผยแพร่ข้อมูลข่าวสาร โดยตัวแบบประกอบด้วย 6 กิจกรรมหลัก ได้แก่ การตรวจสอบข้อมูล การลงทะเบียน การยืนยันข้อมูล การรายงาน ข้อมูล การวิเคราะห์ข้อมูล และการสะท้อนข้อมูล และมี 4 กิจกรรมเสริมคือ การสื่อสารโดยการประชุม และการระดมสมองการฝึกอบรม การกำกับดูแลและการจัดเตรียมทรัพยากรที่จำเป็น หลังจากได้ดำเนินการตามตัวแบบเป็นเวลา 1 ปี การศึกษาครั้งนี้สามารถที่จะพัฒนาตัวชี้วัดและเกณฑ์การวัดขนาดของปัญหาสารเสพติด และการใช้ประโยชน์ข้อมูลสารเสพติดจากรายละเอียดในรายงานประจำเดือน ด้านรายงานการจับกุมและด้านการเข้ารับการบำบัดรักษา ด้านผู้ค้าสารเสพติด ด้านผู้เสพสารเสพติด และด้านผู้ที่มีความเสี่ยงต่อสารเสพติด โดยมีผู้นำชุมชนเป็นผู้รายงานข้อมูล ปัจจุบันระบบเฝ้าระวังสารเสพติดมีประสิทธิภาพในด้านความเป็นตัวแทน (93.0%), ความไว (92.7%), ความทันเวลา (84.7%), ความสามารถในการทำนาย (84.5%), การยอมรับ (82.5%), ความง่าย (82.5%) และความถูกต้อง (80.3%)*

***สรุป:*** *โดยการพัฒนาตัวแบบระบบเฝ้าระวังสารเสพติด เป็นการปรับปรุงและพัฒนาระบบเฝ้าระวังด้านสุขภาพจากฐานรากซึ่งประกอบด้วยชุมชนและหมู่บ้านให้มีส่วนในการพัฒนาระบบรวมไปถึงเป็นส่วนหนึ่งในกลไก ภายในระบบนำไปสู่ระบบเฝ้าระวังด้านสุขภาพที่มีประสิทธิภาพและมีความเหมาะสมสำหรับใช้เฝ้าระวังปัญหาด้านสุขภาพในชุมชนระดับอำเภอ*