

7. アンケート調査集計結果

(1)カウンターパートに対するアンケート調査 (アンケート配布数:26、回収数:14)

1. Effectiveness

Q1/1 Please choose one of the degree which shows your evaluation how much the project fulfilled its goal on a 100-point scale. (Please note that 70 points is the boarder line for passing mark).

Evaluation	No. of answers	%
Q1/1/1 Achievement level of the Project Purpose		
100 points	1	8.3%
90-99 points	2	16.7%
80-89 points	6	50.0%
70-79 points	3	25.0%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-a Number of ambulance calls		
100 points	0	0.0%
90-99 points	5	41.7%
80-89 points	4	33.3%
70-79 points	3	25.0%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-c Number of patients seen on site		
100 points	1	8.3%
90-99 points	4	33.3%
80-89 points	3	25.0%
70-79 points	4	33.3%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-e Time between call and reaching the site		
100 points	0	0.0%
90-99 points	1	8.3%
80-89 points	6	50.0%
70-79 points	4	33.3%
60-69 points	1	8.3%
less than 59 points	0	0.0%
Total valid answer	12	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-g Time for traveling back		
100 points	0	0.0%
90-99 points	2	18.2%
80-89 points	4	36.4%
70-79 points	4	36.4%
60-69 points	1	9.1%
less than 59 points	0	0.0%
Total valid answer	11	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-i Organization (EMT/foundation/volunteer)		
100 points	0	0.0%
90-99 points	2	22.2%
80-89 points	3	33.3%
70-79 points	3	33.3%
60-69 points	1	11.1%
less than 59 points	0	0.0%
Total valid answer	9	

Evaluation	No. of answers	%
Q1/1/2 Achievement level of the indicator of Output 1		
100 points	0	0.0%
90-99 points	1	9.1%
80-89 points	3	27.3%
70-79 points	5	45.5%
60-69 points	2	18.2%
less than 59 points	0	0.0%
Total valid answer	11	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-b Number of missions		
100 points	0	0.0%
90-99 points	5	41.7%
80-89 points	4	33.3%
70-79 points	3	25.0%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-d Response time		
100 points	0	0.0%
90-99 points	3	27.3%
80-89 points	4	36.4%
70-79 points	3	27.3%
60-69 points	1	9.1%
less than 59 points	0	0.0%
Total valid answer	11	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-f Time in the field		
100 points	0	0.0%
90-99 points	2	18.2%
80-89 points	6	54.5%
70-79 points	3	27.3%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	11	

Evaluation	No. of answers	%
Q1/1/3 Achievement level of indicator of Output 2-h Operation not appropriate		
100 points	0	0.0%
90-99 points	3	27.3%
80-89 points	5	45.5%
70-79 points	3	27.3%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	11	

Q1/1/4 Achievement level of indicator of Output 3-a Traffic injury rate		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	7	63.6%
70-79 points	2	18.2%
60-69 points	1	9.1%
less than 59 points	1	9.1%
Total valid answer	11	

Q1/1/4 Achievement level of indicator of Output 3-b % of those wearing helmets		
100 points	0	0.0%
90-99 points	5	41.7%
80-89 points	2	16.7%
70-79 points	4	33.3%
60-69 points	1	8.3%
less than 59 points	0	0.0%
Total valid answer	12	

Q1/1/4 Achievement level of indicator of Output 3-c % of those using seatbelts		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	4	33.3%
70-79 points	5	41.7%
60-69 points	2	16.7%
less than 59 points	1	8.3%
Total valid answer	12	

Q1/1/5 Achievement level of indicator of Output 4-a Number of training course held		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	2	18.2%
70-79 points	6	54.5%
60-69 points	2	18.2%
less than 59 points	1	9.1%
Total valid answer	11	

Q1/1/5 Achievement level of indicator of Output 4-b Number of trainees		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	2	18.2%
70-79 points	8	72.7%
60-69 points	1	9.1%
less than 59 points	0	0.0%
Total valid answer	11	

Q1/1/5 Achievement level of indicator of Output 4-c Number of published research		
100 points	4	0.0%
90-99 points	0	0.0%
80-89 points	8	66.7%
70-79 points	4	33.3%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Q1/1/5 Achievement level of indicator of Output 4-d Average score of pre- and post tests		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	4	44.4%
70-79 points	2	22.2%
60-69 points	3	33.3%
less than 59 points	0	0.0%
Total valid answer	9	

Q1/1/6 Achievement level of indicator of Output 5-a Number of meetings held for model distribution		
100 points	0	0.0%
90-99 points	5	41.7%
80-89 points	4	33.3%
70-79 points	3	25.0%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	12	

Q1/1/6 Achievement level of indicator of Output 5-b Number of visitors for the model from other Provinces		
100 points	0	0.0%
90-99 points	5	38.5%
80-89 points	2	15.4%
70-79 points	6	46.2%
60-69 points	0	0.0%
less than 59 points	0	0.0%
Total valid answer	13	

Q1/2 Do you think how much "Outputs" written in the PDM contributed to achieve the Project Purpose, "Mortality rate from traffic injury is reduced in Khon Kaen Province"?

Contribution to the Project Purpose	Output 1		Output 2		Output 3		Output 4		Output 5	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Very much	7	50.0%	9	64.3%	11	78.6%	8	57.1%	10	71.4%
To some extent	7	50.0%	5	35.7%	3	21.4%	6	42.9%	4	28.6%
Not at all	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total valid answer	14		14		14		14		14	

Comments for Q 1/2

There should be more continuous cooperation from all organizations. (2)
 Each process in the project should be evaluated more on whether the purposes of each process is accomplished or not.
 Cooperation from the other organizations is well developed. (1)
 Pre-hospital care (such as first-aids) and the quality of treatment should be more emphasized. (1)

2. Efficiency

Q2/1 Do you think that the timing and period of assignment of counterpart members and Japanese experts was appropriate?

*1) C/P: Counterpart members *2) J/E: Japanese Experts
*3) #: Number of Answer *4) %: Percentage of the total valid answer

		J/E		C/P	
		#	%	#	%
Q2/1/1	Timing of the assignments				
	Appropriate	12	85.7%	11	78.6%
	Fair	2	14.3%	3	21.4%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

		J/E		C/P	
		#	%	#	%
Q2/1/2	Period of assignment				
	Appropriate	11	78.6%	10	71.4%
	Fair	3	21.4%	3	21.4%
	Not appropriate	0	0.0%	1	7.1%
	Total valid answer	14		14	

Q2/1/3 Number of assigned personnel					
		#	%	#	%
	Appropriate	13	92.9%	4	28.6%
	Fair	1	7.1%	8	57.1%
	Not appropriate	0	0.0%	2	14.3%
	Total valid answer	14		14	

Q2/1/4 Capability					
		#	%	#	%
	Appropriate	12	85.7%	8	57.1%
	Fair	2	14.3%	6	42.9%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

Q2/1/5 Reasons for stop working for the Project			C/P	
			#	%
	Resigned to work for private sector/NGOs, etc		2	14.3%
	Transferred to a public health institution in other provinces		1	7.1%
	Transferred for other offices at Khon Kaen Hospital		8	57.1%
	Transferred to a public health institution in Khon Kaen		0	0.0%
	Retired		0	0.0%
	Study		1	7.1%
	Others		3	21.4%
	Total valid answer		15	

Q2/2 Do you think that the content, quality and numbers of training/seminars carried out by the Project were appropriate?

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/2/1	Content and quality of Project's training/seminars				
	Appropriate	9	64.3%	9	64.3%
	Fair	5	35.7%	5	35.7%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/2/2	Numbers/period of Project's training/seminars				
	Appropriate	8	57.1%	7	50.0%
	Fair	6	42.9%	7	50.0%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

Q2/3 Do you think that the duration, instructors and contents of counterpart training in Japan appropriate?

Q2/3	Counterpart training in Japan	Duration of training		Instructors of training		Contents of training	
		#	%	#	%	#	%
	Appropriate	5	41.7%	8	72.7%		63.6%
	Fair	7	58.3%	3	27.3%	4	36.4%
	Not appropriate	0	0.0%	0	0.0%	0	0.0%
	Total valid answer	12		11		11	

Q2/4 Do you think that the timing, quantity and quality of machinery and equipment provided by both Thai and Japanese sides appropriate?

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/4/1	Timing of machinery/equipment installation				
	Appropriate	7	50.0%	11	78.6%
	Fair	7	50.0%	3	21.4%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/4/2	Quantity of machinery/equipment				
	Appropriate	8	57.1%	12	85.7%
	Fair	5	35.7%	2	14.3%
	Not appropriate	1	7.1%	0	0.0%
	Total valid answer	14		14	

Q2/4/3 Quality of machinery/equipment					
	Appropriate	12	85.7%	13	92.9%
	Fair	1	7.1%	1	7.1%
	Not appropriate	1	7.1%	0	0.0%
	Total valid answer	14		14	

Q2/4/4 Easiness of maintenance and repair of machinery/equipment					
	Appropriate	9	64.3%	9	64.3%
	Fair	5	35.7%	5	35.7%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

Comments for Q2/4

There should be advices on equipment's usage and maintenance for the staffs who use the equipment and the maintenance officials from the seller. (2)

There should be the staff's need assessment before supplying the new equipment in order to share ideas, and obtain best and appropriate equipment for the project's benefit. (1)

Support from both Japan and Thai sides should be clearly distinguished from each other and separately

Q2/5 How do you think about the project operating cost shared by the both Thai and Japanese side?

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/5/1	Timing of provision				
	Appropriate	5	35.7%	10	71.4%
	Fair	9	64.3%	4	28.6%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

		By Thai instructors		By Japanese experts	
		#	%	#	%
Q2/5/2	Amount of project operating cost				
	Appropriate	9	64.3%	13	92.9%
	Fair	4	28.6%	1	7.1%
	Not appropriate	1	7.1%	0	0.0%
	Total valid answer	14		14	

Q2/5/3 Subjects of payment of project operating cost					
	Appropriate	6	42.9%	10	71.4%
	Fair	8	57.1%	4	28.6%
	Not appropriate	0	0.0%	0	0.0%
	Total valid answer	14		14	

Q2/6 Do you think the space and building provided by the Thai side were appropriate?

Q2/6	Space and building provided by Thai side	Timing of provision		Space of the rooms		Facilities of the rooms	
		#	%	#	%	#	%
	Appropriate	12	85.7%	10	71.4%	9	69.2%
	Fair	1	7.1%	4	28.6%	4	30.8%
	Not appropriate	1	7.1%	0	0.0%	0	0.0%
	Total valid answer	14		14		13	

3. Project implementation process

Q3/1 Please list 3 positive factors (both internal and external) which promoted smooth project implementation and achievement of Project Purpose. In addition, please write what you did for maximizing their positive influences.

Positive internal factors	No. of answer	%	Positive external factors	No. of answer	%	Actions to maximize influences	No. of answer	%
Project leader's creativeness and enthusiasm.	8	57.1%	Government's clear policy focuses on Project Purpose.	4	28.6%	Creating the plan and cooperating with others at all steps of the project.	2	14.3%
The director's support and all staffs' enthusiasm.	4	28.6%	Receiving good cooperation from many organizations.	4	28.6%	Cooperating KKH and other provincial organization to set the campaign.	1	7.1%
Staffs' dedication to work.	4	28.6%	Receiving the financial support from abroad and government.	3	21.4%	Promoting the positive factors in patient's treatment.	1	7.1%
Sharing the same objectives and strong belief.	1	7.1%	More budgets from the government.	1	7.1%	Promoting all positive factors for the project.	1	7.1%
Clear purpose of the project.	1	7.1%			0.0%	Supporting personnel with convenient equipment.	1	7.1%
Each sub committee is responsible for the assigned work.	2	14.3%			0.0%	Participating in meetings regularly.	1	7.1%
Regular Meetings	1	7.1%			0.0%	Learning more in order to give more effective treatment.	1	7.1%
Effective staffs.	2	14.3%			0.0%	Evaluating the outcome of each step.	1	7.1%
Systematical process and well-planned project	1	7.1%						
Total valid answer	24		Total valid answer	12		Total valid answer	9	

Q3/2 Please list 3 negative factors (both internal and external) which inhibited smooth project implementation and achievement of Project Purpose. In addition, please write what you did for minimizing their negative influences.

Positive internal factors	No. of answer	%	Positive external factors	No. of answer	%	Actions to minimize influences	No. of answer	%
Too much work load.	7	50.0%	Lack of the government's budget.	7	50.0%	Motivating the positive attitude and try to improve the staff's potentiality.	2	14.3%
Lack of man's power.	6	42.9%	Economic Crisis's influence.	2	14.3%	Providing a chance for the people to participate in research in order to establish the awareness of accident's impact.	1	7.1%
A lot of tasks to develop the system.	3	21.4%	People's driving behavior is not appropriate.	1	7.1%	Giving useful information and doing public awareness promotion.	1	7.1%

Lack of specialists in each medical field.	2	14.3%	People do not recognize importance to join the injury prevention activities.	1	7.1%	Reporting the difficulties to the higher administrators.	1	7.1%
Some staffs' resignation	1	7.1%	The changing government.	1	7.1%			0.0%
Inadequate Project's Public Relations.	2	14.3%			0.0%	Promoting the project's public relation to get more cooperation from inside and outside the hospital.	1	7.1%
Cooperation is limited between the relevant organizations.	2	14.3%			0.0%			0.0%
Limitation of project's period.	1	7.1%			0.0%			0.0%
		0.0%			0.0%			0.0%
Total valid answer	24		Total valid answer	12		Total valid answer	6	

Q3/3	As time passes, are there any changes (ex. initiatives, attitudes, and motivation) in you and your coworkers of counterpart?	No. of answer	%
	Some staffs may have changed their attitude and motivation as there are many problems during working together.	3	21.4%
	Learning from the other people's experiences and having good relationship between each other.	1	7.1%
	Staffs became more familiar with one another.	1	7.1%
	There is the evaluation from outside so every unit in KKH has to develop the staff's potentiality and motivate them the positive value and attitude.	1	7.1%
	The missions of project became famous and well-known so that MOPH took it as the model and the hot issue for the country.	1	7.1%
	There should be more public relation.	1	7.1%
	Total valid answer	8	

Q3/4	How do you think about the relationship between counterpart members and Japanese experts?	No. of answer	%
	Very good	7	50.0%
	Good	6	42.9%
	Fair	1	7.1%
	Not good	0	0.0%
	Total valid answer	14	

Q3/5 How do you think about the collaboration with other organizations and donors?

	Volunteer organizations		WHO		Police		Provincial Safety Board		Others	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Very good	3	23.1%	5	38.5%	4	30.8%	4	30.8%	1	33.3%
Good	9	69.2%	7	53.8%	8	61.5%	7	53.8%	1	33.3%
Fair	1	7.7%	1	7.7%	1	7.7%	2	15.4%	1	33.3%
Not good		0.0%		0.0%		0.0%		0.0%		0.0%
Total valid answer	13		13		13		13		3	

Q3/6 Please list 3 difficulties in conducting collaborative work and describe how you have overcome them.

Difficulty in collaborative work	No. of answer	%	Actions to overcome them	No. of answer	%
No enough time.	2	14.3%			0.0%
Some redundant process of task.	2	14.3%			0.0%
A lot of routine work.	2	14.3%			0.0%
Different points of view	2	14.3%	Inviting to the meeting as often as possible to have the chance to talk and get more familiar.	2	14.3%
Receiving less cooperation from some organizations.	2	14.3%			0.0%
Difficulties in language communication.	2	14.3%			0.0%
Some part of the system inhibits the project achievement	2	14.3%	No solution was found.	2	14.3%
No budget supplied for the project	1	7.1%	Putting effort to find the budget from other organizations.	1	7.1%
Staffs' job demarcation is not clearly informed.	1	7.1%			0.0%
Some staff's style of working	1	7.1%			0.0%
System of budget's regulation.	1	7.1%			
Staffs have different available time so sometimes it is hard to get the contact and cooperation from each other.	2	14.3%	Everyone who gets involved with the project should seriously follow the resolution conducted together.	1	7.1%
Not effective communication between cooperating each other.	2	14.3%	Conducting meetings to solve the problem together.	2	14.3%
Total valid answer	22		Total valid answer	5	

Q3/7 How and who planned annual action plan and job demarcation of each section?

• The annual plan is set together by the heads of each sub committees. (5)
 • The annual plan is set together by the heads of each sub committees. (5)
 • Every staff who gets involved in each process should have a chance to participate seriously from the beginning of each process.(2)
 • The action plan is set every year by ER staffs and ER developing committee. (1)

Q3/8 How were monitoring and evaluation results fed-back to project activities?

- Useful (3)
 • The result of the evaluation will give better and different suggestions which will be useful in the future.(2)
 • As monitoring and evaluation were conducted in the form of friend's relationship not the very formal one, I felt better to answer and of course, curious to know the results. (1)

Q3/9 PDM defined that following 4 external factors that would negatively influence success of the project implementation and fulfillment of Outputs, if they were not improved. Were there any influences from following aspects?

Influence of external factors	Communication system (public phone, etc)		Socio-economic conditions of patients		Law enforcement (traffic rules)		Traffic engineering	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Negatively affected	9	75.0%	7	58.3%	11	91.7%	10	83.3%
No influence	0	0.0%	1	8.3%	0	0.0%	0	0.0%
Positively affected	3	25.0%	4	33.3%	1	8.3%	2	16.7%
Total valid answer	12		12		12		12	

4. Impact

Q4/1 Please evaluate current achievement level of following indicators on a 100-point scale. (Please note that 70 points is the boarder line for passing mark). In addition, please describe your expectation how much the indicators will be satisfied by 2010.

	No. of answers	%
Q4/1/1 Current level of Overall Goal's indicator		
Number of provinces that applied		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	0	0.0%
70-79 points	5	62.5%
60-69 points	3	37.5%
less than 59 points	0	0.0%
Total valid answer	8	

	No. of answers	%
Q4/1/2 Current level of Overall Goal's indicator		
Mortality rate form traffic injury in the whole country is reduced.		
100 points	0	0.0%
90-99 points	0	0.0%
80-89 points	0	0.0%
70-79 points	3	50.0%
60-69 points	3	50.0%
less than 59 points	0	0.0%
Total valid answer	6	

	No. of answers	%
Q4/1/1 Level of Overall Goal in the next 5 years		
Number of provinces that applied		
All provinces	2	33.3%
90-99 % of provinces	0	0.0%
80-89 % of provinces	2	33.3%
70-79 % of provinces	2	33.3%
60-69 of provinces	0	0.0%
less than 59 of provinces	0	0.0%
Total valid answer	6	

	No. of answers	%
Q4/1/2 Level of Overall Goal in the next 5 years		
Mortality rate form traffic injury in the whole country is reduced.		
All provinces	2	50.0%
90-99 % of provinces	0	0.0%
80-89 % of provinces	2	50.0%
70-79 % of provinces	0	0.0%
60-69 of provinces	0	0.0%
less than 59 of provinces	0	0.0%
Total valid answer	4	

Q4/2 Please describe if there were any unexpected positive impacts of the Project.

	No. of answers	%
People became aware of and more familiar with Road Safety and the social rules.	2	14.3%
Staffs learn to work as a team and give the importance to the patients as the center.	2	14.3%
Better driving behavior leads to the less accidents.	2	14.3%
Government's policy that supports the project's idea.	4	28.6%
Mortality rate is decreased obviously.	1	7.1%
Clear outcomes.	1	7.1%
Law enforcement is seriously	1	7.1%
Total valid answer	13	

Q4/3 Were EMS members who were trained by the Project requested to go to Phuket for conduct emergency relief activities to cope with Tsunami incidence?

• 5 Nurses went to help. (5)
• There is no request from the south.(2)
• There were enough EMS doctors and nurses around Phuket.(2)
• Forensic Pathology doctors were needed. (2)
• No one go to Phuket. (1)

Q4/4 Please describe if there were any unexpected negative impacts of the Project

	No. of answer	%
Ambulances are sometimes called to receive non-serious patients.	1	7.1%
There is the rapid people's need despite short of man's power	1	7.1%
The awareness about road safety of the people is still not increased highly.	1	7.1%
Strictness in social rules is not emphasized by the politicians as they fear of losing the popularity.	1	7.1%
Total valid answer	4	

5. Relevance

Q5/1 Please describe the definition of Khon Kaen Model. Do you think that the definition is shared among counterpart members?

	No. of answer	%
Yes	11	91.7%
No	1	8.3%
Total valid answer	12	

Comments for Q 5/1

Unique project that has not been established in any other provinces in Thailand.(2)
 Successful project and also the excellent model for other provinces(2)
 The project was developed in Khon Kaen first.(1)
 This project prevents the traffic injury and also organizes the social safety system. (1)
 Simple and perfect model.(1)
 The project receives various kind of cooperation from many organizations in order to reduce the numbers of accidents in KK. (2)

Q5/2 The Project required Trauma Center to cover Traffic accident prevention, transportation of patients, and treatment at hospital simultaneously. In a sense, the Project designated the Center to bear major tasks of Police and Provincial Safety Board. How do you think about the project approach? Why?

	No. of answer	%
Positive	11	78.6%
Negative	0	0.0%
Mixed	3	21.4%
Total valid answer	14	

Comments for Q 5/2

Cooperation from Police and Provincial Safety Board should be emphasized more in order to get the better and more effective outcomes.(5)
 Good cooperation with the Provincial Safety Committee.(3)
 It is a excellent strategy to join with them together. (1)
 For faster and better outcome, we implemented the project together.(1)

Q5/3 The Project required Trauma Center to cover the activities at Khon Kaen (to achieve the Project Purpose) and the activities to expand the model to other provinces (to achieve Overall goal). How do you think about the project approach? Why?

	No. of answer	%
Positive	13	92.9%
Negative	0	0.0%
Mixed	1	7.1%
Total valid answer	14	

Reasons for Q 5/3

An excellent model of the project, itself (6)
 Prevention is the best way that should be emphasized more to solve the problem, because it is cheaper and worth to invest in prevention part than to invest in treatment. (1)
 Some sub projects can be carried out without the full support from the project. (1)
 As the accident can happen all the time; thus, there should be best practice model for the expansion to the other provinces. (1)

Q5/4 The Project chose a Regional Hospital (Khon Kaen Hospital) to be the main counterpart organization, not volunteer organizations, which transport majority of patients to health facilities. How do you think about the project approach? Why?

	No. of answer	%
Positive	12	85.7%
Negative	0	0.0%
Mixed	2	14.3%
Total valid answer	14	

Reasons for Q 5/4

KKH is standard and professional and systematical organization(7)
 There are a lot of professional medical staffs in KKH (2)
 Other organizations do not have the experts to help the patients (1)
 High potentiality of the hospital (1)
 KKH shares the same policy of the project.(1)

Q5/5 The Project included districts as the target areas in the middle of the project cooperation period. In general, expansion of service area negatively correlated with quality of service. How do you think about the project approach to expand service area to districts? Why?

	No. of answer	%
Positive	10	71.4%
Negative	1	7.1%
Mixed	3	21.4%
Total valid answer	14	

Reasons for Q 5/5

Good. If the community becomes responsible by itself, the project will be developed continuously and effectively.(5)
 Better quality of life and treatment will be expanded to districts. (3)
 Negative. It is a policy of the government. However, the potentiality of many district organizations are not enough and ready to accomplish the sub project.(3)
 It is more flexible and provides the treatment to the patient faster. (1)
 The sub unit in every district will be the center to give knowledge and cooperate with organizations in its own district, and motivate the relevant organizations to realize impact of accidents. (1)

Q5/6

The PDM clearly defined the type of indicators to be obtained, from the project commencement. How do you think about the approach? Why?

	No. of answer	%
Positive	11	91.7%
Negative	0	0.0%
Mixed	1	8.3%
Total valid answer	12	

Reasons for Q 5/6

All indicators can point out the project's success. (6)
 Indicators can be used as the guidance in planning process and during all the activities of the project. (2)
 Some indicators cannot be evaluated obviously during 1-5 years. (1)
 Indicators control the quality and the effectiveness, so we have to follow them. (1)

Q5/7

The Project focused on Khon Kaen province and aimed to expand its influence to Northeast Region. The project did not select Bangkok or other regions as target. How do you think about the project approach? Why?

	No. of answer	%
Positive	10	83.3%
Negative	0	0.0%
Mixed	2	16.7%
Total valid answer	12	

Reasons for Q 5/7

The size of town is appropriate and easier to organize than the big city. (3)
 Khon Kaen province is considered as it has readiness and power to carry out the project. (2)
 The leader of the project and all staff's enthusiasm. (1)
 There is Narenthorn Center in Bangkok already. Moreover, there was no any model in the other regions at that time so they chose KKH to set the project. (1)
 Sometimes cooperation cannot be received easily as it is conducted in the region part.(1)

Q5/8/1 Were there any unnecessary overlaps between WHO's and JICA's assistance?

	No. of answer	%
Yes	0	0.0%
No	9	100.0%
Total valid answer	9	

Q5/8/2 Were there any positive synergy effects among WHO's and JICA's assistance?

Yes	10	100.0%
No	0	0.0%
Total valid answer	10	

Comments for Q 5/8

It will be very helpful if both JICA and WHO work together in every region. (3)
 JICA helps us to create the model. (2)
 WHO can help and guarantee our quality.(2)
 JICA and WHO give useful advice. (1)

6. Sustainability

Q6/1 How do you think about the MOPH's support for the Trauma Center after the Project completion?

	No. of answer	%
More than current level	4	36.4%
As often as current level	1	9.1%
Less frequent than now	6	54.5%
Much less than current level		0.0%
Total valid answer	11	

Comment for 6.1

- Of course, there will be the budget to support sub projects in EMS, Injury Prevention from MOPH. The government policy focuses on how to reduce the traffic injury and death rate so there is a trend all over the country and possibility to gain more budgets.(7)
- The frequency of gaining budget will be less. (2)
- Injury prevention is not the main issue of MOPH so this section will be transferred to provincial emergency relief office. (1)
- Research and training may be supported less.(1)
- There is a strong belief and the outcome of project that is seen obviously.(1)

Q6/2 How many percentage of trained personnel by the Project expected to continue working at the current positions after the project completion?

Evaluation	No. of answers	%
100%	1	11.1%
90-99 %		0.0%
80-89 %	2	22.2%
70-79 %	3	33.3%
60-69 %	1	11.1%
less than 59 %	2	22.2%
Total valid answer	9	

Comment for Q6/2

- As the policy is still supportive, there are many continuous tasks to be done until the mission is accomplished. (2)
- They still have the similar tasks and work to do. (1)
- Depending on the leader's performance and management from now on. (1)
- Some will go to study further and some will have to quit for taking care of their families.(1)
- Half of them will still work as usual and the other will have to change their rules and tasks. (1)

Q6/3 Does the Trauma center have sufficient staff members to continue the activities after project completion in 2005?

	Output 1		Output 2		Output 3		Output 4		Output 5	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Sufficient	5	35.7%	8	57.1%	5	35.7%	1	7.1%	8	57.1%
Barely enough	7	50.0%	6	42.9%	9	64.3%	10	71.4%	6	42.9%
In short	2	14.3%	0	0.0%	0	0.0%	3	21.4%	0	0.0%
Total valid answer	14		14		14		14		14	

Comment for Q6/3

It depends on the government's policy and budgets. (4)
 All process in this project was actually the same process in this hospital so there may be no any problems as they got familiar. (1)
 There is the evaluation from inside and outside of KKH in order to increase the effectiveness.(1)

Q6/4 Does the Trauma Centre have sufficient technical knowledge and skills to continue the activities after project completion in 2005?

	Output 1		Output 2		Output 3		Output 4		Output 5	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Sufficient	6	42.9%	6	42.9%	6	42.9%	5	35.7%	7	50.0%
Barely enough	8	57.1%	8	57.1%	7	50.0%	6	42.9%	6	42.9%
In short	0	0.0%	0	0.0%	1	7.1%	3	21.4%	1	7.1%
Total valid answer	14		14		14		14		14	

Comment for Q6/4

Staffs in the projects became more skillful. (4)
 Injury prevention unit is sufficient enough and it is considered as the mission of the country.(1)
 There will be additional staffs to help the project (they will finish studying soon).(1)
 Lack of support for the personnel will cause more serious insufficient man power's problem in the future. (1)

Q6/5 Do you think the Trauma Center continue in-house staff training to transfer the knowledge and skills to junior/new staff to implement activities after the project completion in 2005?

Evaluation	Maintenance of the		Trauma patient		Pre-hospital		Prevention of traffic	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
More than current level	5	35.7%	5	35.7%	7	50.0%	4	28.6%
As often as current level	6	42.9%	7	50.0%	4	28.6%	7	50.0%
Less frequent than now	3	21.4%	2	14.3%	3	21.4%	2	14.3%
Much less than current level	0	0.0%	0	0.0%	0	0.0%	1	7.1%
Total valid answer	14		14		14		14	

Comment for Q6/5

It depends on the receiving budgets.(3)

TCC's quality should be more emphasized and developed.(1)

Q6/6 Does the Trauma Center have sufficient financial resources to continue activities after project completion in 2005?

	Output 1		Output 2		Output 3		Output 4		Output 5	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Sufficient	4	28.6%	5	35.7%	4	28.6%	1	7.1%	5	35.7%
Barely enough	8	57.1%	8	57.1%	8	57.1%	11	78.6%	8	57.1%
In short	2	14.3%	1	7.1%	2	14.3%	2	14.3%	1	7.1%
Total valid answer	14		14		14		14		14	

	For maintaining the equipment/facilities		For updating the equipment/facilities	
	No. of answer	%	No. of answer	%
Sufficient	2	14.3%	0	0.0%
Barely enough	9	64.3%	10	71.4%
In short	3	21.4%	4	28.6%
Total valid answer	14		14	

Comment for Q6/6

Needs to ask for the financial support from abroad and other organizations.(2)

Continuous activities should be further supported.(1)

Less budgets to manage with all outputs.(1)

Depending on the economics and government's policy.(1)

7. Future plan after project completion

Q7/1 Which area of activities should the Trauma Center emphasize more after completion of the Project?

Evaluation	No. of answers	%
Output 1	11	78.6%
Output 2	9	64.3%
Output 3	8	57.1%
Output 4	8	57.1%
Output 5	7	50.0%
Others	0	0.0%
Total valid answer	43	

Q7/2 How do you evaluate Khon Kaen Hospital's capacity to take over the project activities by itself (without donors' support)?

	Output 1		Output 2		Output 3		Output 4		Output 5	
	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%	No. of answer	%
Impossible	1	8.3%	1	8.3%	1	8.3%	0	0.0%	1	8.3%
Difficult without major changes	1	8.3%	0	0.0%	4	33.3%	2	16.7%	0	0.0%
Possible with minor assistance	8	66.7%	10	83.3%	7	58.3%	10	83.3%	8	66.7%
Possible without problem	2	16.7%	1	8.3%	0	0.0%	0	0.0%	3	25.0%
Total valid answer	12		12		12		12		12	

Q7/3 Please list 3 most needy assistance, in order for the Khon Kaen Hospital and Trauma Center to conduct above activities, if any

	No. of answer	%
Training program in all levels of medical staffs at KKH.	2	14.3%
Training or suggestion from the experts.	2	14.3%
Financial support.	2	14.3%
Necessary equipment	1	7.1%
Personnel recruitment support	1	7.1%
Research support.	1	7.1%
Cooperation in order to expand the project	1	7.1%
Government's policy	1	7.1%
Total valid answer	11	

(2) 地域病院・州病院に対するアンケート調査 集計結果

アンケート対象:

全国の地域病院:送付数(23)、回収数(14)

東北部の県病院:送付数(14)、回収数(12)

1. Importance of reduction of trauma injury at your jurisdiction

	Total answers	%	Regional Hospital	Provincial Hospital
Q1/1 At the jurisdiction of your hospital, reduction of mortality rate from traffic injury is a major priority?				
a) Yes	25	96.2%	14	11
b) No	0	0.0%	0	0
c) No answer	1	3.8%	0	1
Total	26		14	12

Q1/2 Was mortality rate from traffic injury at your region reduced in the last 4 years?				
a) Greatly reduced	0	0.0%	0	0
b) To some degree	20	76.9%	11	9
c) Not much changed	6	23.1%	3	3
Total	26		14	12

Q1/2/2 Reasons that mortality rate was reduced				
a) Management for trauma patients at health facilities was improved	17	65.4%	10	7
b) Pre-hospital trauma care became effective.	15	57.7%	9	6
c) Prevention of traffic injury was promoted.	16	61.5%	8	8
d) Health staff's technique and skill were improved	11	42.3%	6	5
e) Communication system was improved.	10	38.5%	6	4
f) Socio-economic conditions of people was improved	7	26.9%	5	2
g) Traffic laws were more enforced	14	53.8%	8	6
h) Traffic engineering was improved	11	42.3%	7	4
i) Others	1	3.8%	1	
Total	102		60	42

Q1/2/3 Reasons that mortality rate was not reduced				
a) Management for trauma patients at health facilities was difficult to improve	2	7.7%	0	2
b) Pre-hospital trauma care was difficult to make effective	4	15.4%	1	3
c) Prevention of traffic injury was difficult to be promoted	7	26.9%	4	3
d) Health staff's technique and skill were difficult to improve.	2	7.7%	1	1
e) Communication system was not improved.	1	3.8%	1	0
f) Socio-economic conditions of people was not improved	0	0.0%	0	0
g) Traffic laws were not enforced.	6	23.1%	3	3
h) Traffic engineering was not improved	3	11.5%	1	2
i) Others	1	3.8%	1	0
Total	26		12	14

2. Applicability of Khon Kaen Model to your hospital's EMS activities

	Total answers	%	Regional Hospital	Provincial Hospital
Q2/1 When did you introduce EMS at your hospital?				
a) 1994 and before	0	0.0%	0	0
b) 1995	2	8.0%	2	0
c) 1996	4	16.0%	3	1
d) 1997	0	0.0%	0	0
e) 1998	2	8.0%	1	1
f) 1999	5	20.0%	3	2
g) 2000	1	4.0%	1	0
h) 2001	3	12.0%	0	3
i) 2002	2	8.0%	0	2
j) 2003	0	0.0%	0	0
k) 2004	6	24.0%	3	3
Total	25		13	12

	Total answers	%	Regional Hospital	Provincial Hospital
Q2/2 Which hospital's system did you consult to establish/enhance your EMS activities?				
a) Khon Kaen Hospital (Trauma Center Complex)	18	69.2%	8	10
b) Other hospitals: (Narainthorn EMS Center at Rajavithi Hospital)	7	26.9%	3	4
c) Other hospitals: (Sappasitprasong Hospital in Ubonrachatani)	2	7.7%	0	2
d) None	3	11.5%	3	0
Total	30		14	16

	Total answers	%	Regional Hospital	Provincial Hospital
Q2/3 What kind of Khon Kaen Hospital's activities did your hospital apply to enhance your EMS activities in the last 4 years?				
a) Improved trauma patients' treatment at hospital	19	73.1%	9	10
b) Enhanced patient transportation system	15	57.7%	6	9
c) Promoted traffic injury prevention activities	12	46.2%	5	7
d) In-house staff training	5	19.2%	2	3
e) Others	1	3.8%	1	0
Total	52		23	29

	Total answers	%	Regional Hospital	Provincial Hospital
Q2/4 What actually did your hospital do on above activities?				
a) Changed working procedures	11	42.3%	4	7
b) Studied further on the subjects	7	26.9%	4	3
c) Established operational manuals	7	26.9%	3	4
d) Introduced new methods	2	7.7%	1	1
e) Planed a new project	9	34.6%	3	6
f) Defined staff's job description clearly	8	30.8%	3	5
g) Set standards for staff job performance	9	34.6%	3	6
h) Others	0	0.0%	0	0
Total	53		21	32

Concrete examples for Q2/4				
Set standard of trauma care (2)				
Designing medical audit for trauma patient management (2)				
Setting priority on responsibility of emergency room staffs (1)				
Setting a team which consults of hospital personnel, rescue organization and ambulance station (1)				
Separating EMS work from routine work (1)				
Set up EMS system and network in community (1)				
Training the unit and staff (4)				
Establish job description and evaluated the staff's competency (2)				
Enhanced new year and songkran festival campaign (1)				
Public information for injury prevention (1)				
Promoted traffic injury prevention at primary and secondary schools (1)				

Q2/5 Please list 3 reasons why Khon Kaen Model has not been realized at your hospital.				
a) Budget is in short	2	7.7%	0	2
b) Human resources is in short	2	7.7%	0	2
c) Network among stakeholders is difficult to establish	3	11.5%	1	2
d) Hospital's administration system is different from each other	1	3.8%	0	1
e) Some hospitals already follow Narethron Trauma Center model	2	7.7%	1	1
f) Do not know well about Khon Kaen Hospital's project	1	3.8%	1	0
g) Khon Kaen model is too developed	1	3.8%	0	1
h) No person to contact about the Khon Kaen model	1	3.8%	0	1
Total	13		3	10

3. Hospital's plan on EMS for the coming 5 years.

	Total answers	%	Regional Hospital	Provincial Hospital
Q3/1 Please describe your hospital's plan for the coming 5 years on				
a) Training of personnel	8	30.8%	4	4
b) Improve ambulance and equipment	3	11.5%	0	3
c) Expansion of service area of EMS system (ex. all provinces, community hospital and/or rural area)	9	34.6%	3	6
d) Improve effectiveness of existing EMS system (ex. systematically dividing the unit into sections)	7	26.9%	4	3
e) Improve communication system	5	19.2%	3	2
f) Assign more staff members (ex. EMT)	3	11.5%	0	3
g) Publication of EMS system to the people	6	23.1%	1	5
h) Establishing new center or unit	5	19.2%	1	4
i) Monitor and evaluate the outcome of the existing system	3	11.5%	3	0
j) Improve referral system	1	3.8%	0	1
k) Setting up a standard for work procedures	1	3.8%	1	0
l) Cost analysis to find appropriate service fee	1	3.8%	1	0
Total	44		14	30

Q3/2 Does your hospital plan to utilize Khon Kaen model (or activities initiated by Khon Kaen Hospital) for above activities?				
a) Yes	23	92.0%	11	12
b) No	2	8.0%	2	
Total	25		13	12

Concrete Examples / Comments for Q3/2
Plan to utilize ACLS unit and staff training system. (1)
Plan to utilize referral system guidelines. (1)
KKH's role is the consultant which continuously give suggestion for other hospitals (1)
KKH supports our staff's training (2)
KKH provides equipment. (1)
KKH is the regional hospital which can support providing personnel, equipment and knowledge for small hospital and rural area (2)

4. Hospital's contribution to the Project

	Total answers	%	Regional Hospital	Provincial Hospital
Q4/1 Have you ever made some contribution to the Project for Development for Trauma Center Complex at Khon Kaen Regional Hospital?				
a) Yes	12	46.2%	7	5
b) No	14	53.8%	7	7
Total	26		14	12

Q4/1/2 If your answer is "Yes" to the above question, please describe how:				
a) Made recommendation for improving Project activities	3	11.5%	2	1
b) Taught at the training /seminar of Khon Kaen Hospital	3	11.5%	2	1
c) Gave feedback to improve training course/seminar	5	19.2%	2	3
d) Gave information to the project working group about applicability of Khon Kaen Model	3	11.5%	1	2
e) Involved in project evaluation/monitoring team	3	11.5%	3	0
f) Others	0	0.0%	0	0
Total	17		10	7

5. Recommendation to the Project

	Total answers	%	Regional Hospital	Provincial Hospital
Q5/1 Please provide your constructive suggestions how to improve the Project's seminar.				
a) Should discuss on how to access EMS system and how to improve EMS team in professional way.	1	3.8%	0	1
b) Creating network of NGOs, people, and government	1	3.8%	0	1
c) Participatory research with community and NGOs	1	3.8%	0	1
d) Invite other hospitals to join in the seminar and present the development of KKH model in details	1	3.8%	1	0
e) All community hospitals should be invited to the seminars and discuss about how to apply the KKH model, because there are	2	7.7%	0	2
f) should be organized every year or regularly	2	7.7%	1	1
Total	8		2	6

Q5/2 Please provide your constructive suggestions how to improve applicability of Khon Kaen model to other hospitals.				
a) Frequently conduct public relation and health education activities on trauma	1	3.8%	0	1
b) Classify model to teach each level of hospitals	1	3.8%	0	1
c) Provision of training course to related personnel	3	11.5%	0	3
d) Conduct needs assessment survey on other hospitals in order to assist and establish network, and maintain current activities.	1	3.8%	0	1
e) Continuously inform about the KKH's activities to hospital through journal and bulletins	1	3.8%	0	1
f) Regular and continuous communication	1	3.8%	0	1
g) Other hospitals should be supported in technical transfer	1	3.8%	0	1
h) Solve limitation in budget	2	7.7%	2	
Total	11		2	9

(3) 研修受講経験者に対するアンケート調査 集計結果

アンケート配布数: 250、回収人数: 93

※アンケート回答者の研修参加経験は以下のとおり(複数コースに参加した者もいるため、合計人数は異なる)

研修コース	回収アンケート数
Critical Care	0
ATLS	0
ATLS for trainer	0
ACLS	40
ACLS for trainer	0
BLS	43
BLS for trainer	8
First responder	8
EMT	0
EMS Nurse	2
Others	3
Total	0

1. Training quality and level of acquisition

	Total answers	%
Q1/1 How do you evaluate objective and contents of training, considering the needs at your work place?		
a) Matched perfectly	58	64.4%
b) Matched mostly	31	34.4%
c) Partially matched	1	1.1%
d) A little	0	0.0%
Total	90	

	Total answers	%
Q1/2 How was the quality of instructors?		
Q1/2/a Instructors' familiarity on condition		
a) Excellent	45	48.4%
b) Good	40	43.0%
c) Fair	8	8.6%
d) Poor	0	0.0%
e) Very poor	0	0.0%
Total	93	

Q1/2/b Instructors' experience on the subject		
a) Excellent	45	48.4%
b) Good	38	40.9%
c) Fair	10	10.8%
d) Poor	0	0.0%
e) Very poor	0	0.0%
Total	93	

Q1/2/c Instructors' communication skills		
a) Excellent	38	40.9%
b) Good	45	48.4%
c) Fair	10	10.8%
d) Poor	0	0.0%
e) Very poor	0	0.0%
Total	93	

Q1/2/d Quality of training materials		
a) Excellent	44	47.8%
b) Good	45	48.9%
c) Fair	3	3.3%
d) Poor	0	0.0%
e) Very poor	0	0.0%
Total	92	

Q1/2/e Usage of facilities		
a) Excellent	48	52.7%
b) Good	42	46.2%
c) Fair	1	1.1%
d) Poor	0	0.0%
e) Very poor	0	0.0%
Total	91	

Q1/3/a Were duration of the course appropriate to learn effectively?		
a) Too long	3	3.2%
b) Slightly long	5	5.4%
c) About right	78	83.9%
d) Slightly short	7	7.5%
e) Too short	0	0.0%
Total	93	

Q1/3/b Were the number of trainees in your class appropriate to learn effectively?		
a) Too many	10	11%
b) About right	80	88%
c) Too small	1	1%
Total	91	

Q1/3/c Were qualification of trainees in your class appropriate to learn effectively?		
a) Too senior	4	4%
b) About right	84	94%
c) Too junior	1	1%
Total	89	

Q1/4/a Please rate degree of your understanding on the knowledge introduced in the course?		
a) 100%	2	2.4%
b) 90-99 %	10	11.9%
c) 80-89 %	19	22.6%
d) 70-79%	19	22.6%
e) 60-69 %	8	9.5%
f) 50-59 %	19	22.6%
g) Less than 50 %	7	8.3%
Total	84	

Q1/4/b Please rate degree of your understanding on the skills introduced in the course?		
a) 100%	2	2.4%
b) 90-99 %	9	10.6%
c) 80-89 %	27	31.8%
d) 70-79%	15	17.6%
e) 60-69 %	8	9.4%
f) 50-59 %	16	18.8%
g) Less than 50 %	8	9.4%
Total	85	

Q1/5 Please rate degree of your satisfaction for the training course (cf. 70 points is the boarder line for passing mark)		
a) 100%	0	0.0%
b) 90-99 %	6	7.2%
c) 80-89 %	12	14.5%
d) 70-79%	24	28.9%
e) 60-69 %	23	27.7%
f) 50-59 %	15	18.1%
g) Less than 50 %	3	3.6%
Total	83	

2. Impacts of the training course

	Total answers	%
Q2/1/a How often did you apply knowledge acquired in the training on your job?		
a) Everyday	35	38.9%
b) Every week	14	15.6%
c) Every month	9	10.0%
d) Seldom	30	33.3%
e) Never	2	2.2%
Total	90	

	Total answers	%
Q2/1/b How often did you apply skills acquired in the training on your job?		
a) Everyday	31	34.8%
b) Every week	15	16.9%
c) Every month	8	9.0%
d) Seldom	32	36.0%
e) Never	3	3.4%
Total	89	

Q2/2 How have you actually applied the acquired knowledge on the job?		
a) Applying CPR and/or BLS with the patients in wards	20	21.5%
b) Improving the performance (ex. CPR and LS skills to be more effective)	2	2.2%
c) Giving suggestion for others to perform effectively.	2	2.2%
d) Observing and evaluating the patient's symptom	6	6.5%
e) Applying the knowledge to take care of the patients	21	22.6%
Total	51	

Q2/3 The reasons why you hardly apply the acquired knowledge		
a) Impossible to change the routine work procedures and standard	5	5.4%
b) Job description is not clear	10	10.8%
c) Lack of skilled personnel to work with	6	6.5%
d) Lack of supervisor's understanding	2	2.2%
e) Too busy with other assignments	14	15.1%
f) Learned skills and knowledge were not appropriate to work assignment	7	7.5%
g) Could not attain sufficient knowledge and skills	5	5.4%
h) Lack of facilities/equipment to work with	8	8.6%
i) Lack of operational funds	6	6.5%
j) Others (ex. no chance to use CPR)	9	9.7%
Total	72	

Q2/4/a How much has your performance been improved, after returning from the training?			
a)	Greatly improved	18	25.7%
b)	To some degree	48	68.6%
c)	Not much change	4	5.7%
Total		70	

Q2/4/a How much has your performance been improved, after returning from the training?			
a)	Greatly improved	18	25.7%
b)	To some degree	48	68.6%
c)	Not much change	4	5.7%
Total		70	

Q2/4/b Improvement in accuracy after the training			
a)	Greatly improved	35	38.9%
b)	To some degree	50	55.6%
c)	Not much change	5	5.6%
Total		90	

Q2/4/c Improvement in ability to teach junior staff after the training			
a)	Greatly improved	28	34.1%
b)	To some degree	47	57.3%
c)	Not much change	7	8.5%
Total		82	

Q2/5/a Have you had any chance to share your knowledge and skills that acquired through the course with your colleagues?			
a)	Yes	49	55.1%
b)	To some degree	40	44.9%
c)	Not shared	0	0.0%
Total		89	

Q2/5/b Ways to share the acquired knowledge to colleagues			
a)	Presentation at office	18	19.4%
b)	Instructing at seminar and workshop	7	7.5%
c)	Circulation of course materials	10	10.8%
d)	Writing a report to your organization	7	7.5%
e)	On the job training of your co-workers	37	39.8%
f)	Others (ex. sharing new knowledge during conversation)	12	12.9%
Total		91	

Q2/6 Reasons for not sharing the knowledge with colleagues			
a)	Afraid others to increase their knowledge and be promoted.	0	0.0%
b)	Lack of benefits to share information with others	0	0.0%
c)	Lack of fund to organize seminar/workshop, etc.	0	0.0%
d)	Co-workers are not interested in the topic	1	1.1%
e)	Lack of supervisor's understanding	0	0.0%
f)	Too busy with other assignments	7	7.5%
g)	Learned skills and knowledge were not applicable to co-workers' work assignment	0	0.0%
h)	Could not attain sufficient knowledge and skills	0	0.0%
i)	Others (ex. having no time to talk to each other)	3	3.2%
Total		11	

8. 成果別活動（カウンターパート発表資料）

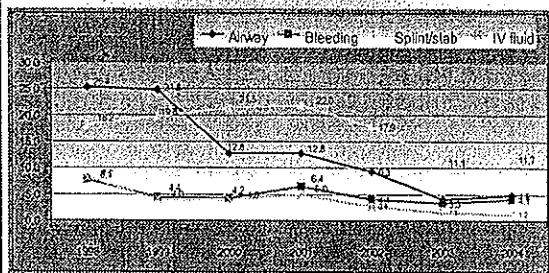
Progress Report

**Subproject 1 :
Trauma service
2000 – 2005**

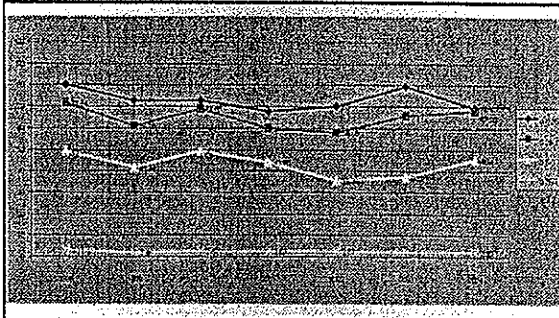
Activities in 2000 - 2003

- Set up RM
 - Set up the project evaluating system
 - Set up the communication system
 - Set up MIS
 - Trauma registry
 - Emergency registry
 - Mapping
 - Revise CPG in ER and the referral
 - Revise mass casualty preparedness plan
- All of the plan in PDM had been implemented and integrated into routine service.

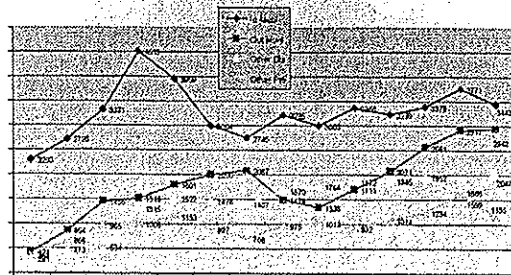
The performance of district hospital in the referral process
Procedure which needed but did not performed



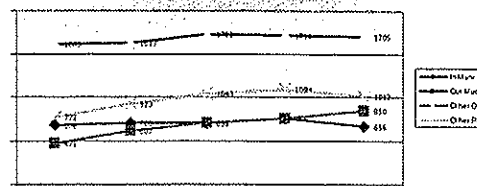
Dead rate by severity classified by
TRISS



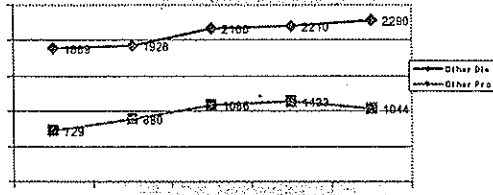
Trauma Service in Trauma and Critical Care Center
Number of injured patient from Traffic injury 1991-2003



Trauma Service in Trauma and Critical Care Center
Number of Injured Patient from Traffic Injury admitted in KKH 1998-2003

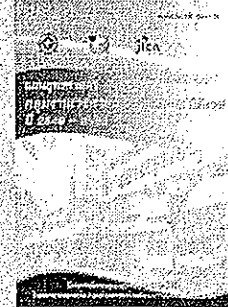


Trauma Service in Trauma and Critical Care Center
 Number of Injured Patient from Traffic Injury was referred to KKH 1998-2003



Important activities in 2004 – 2005

- Developed ER master plan 2005 – 2009



Supplementary Activities February – July 2004

- Established training program for Emergency Physician
 - 3 Residents per year
 - Start training since 1 June 2004
 - New ER staff on duty schedule

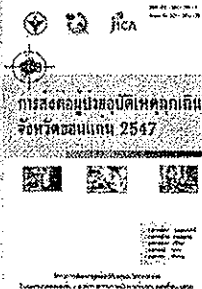
Important activities in 2004 – 2005

- Established training program for Emergency Physician



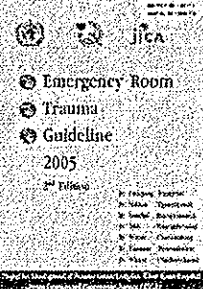
Important activities in 2004 – 2005

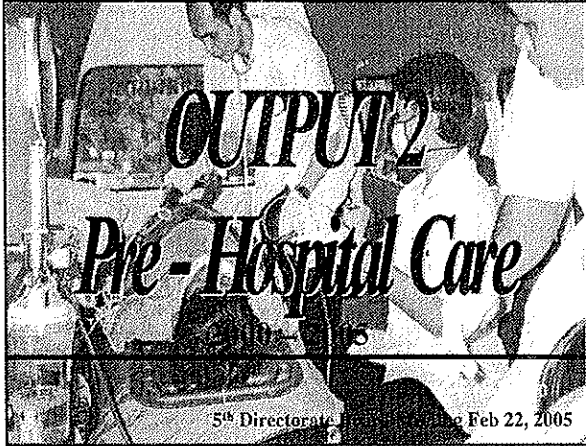
- Revise the referral guideline 2004



Important activities in 2004 – 2005

- Revise the Emergency Room Trauma Guideline 2005





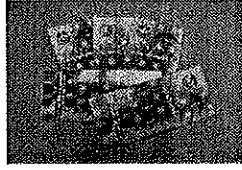
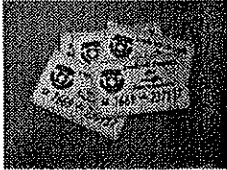
Pre – hospital Care

1. Public Relation
2. Command Control Center
3. Substation
4. Training
5. EMS & Volunteer guideline
6. District – level Pre – hospital Care

1. Public Relation

2000

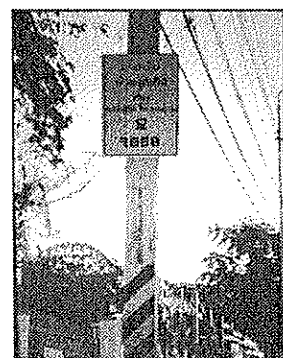
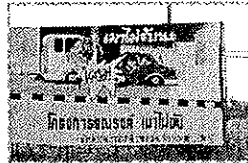
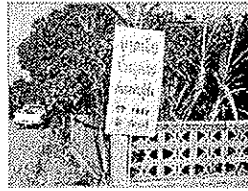
- 50,000 EMS Cards
- 10,000 EMS folders

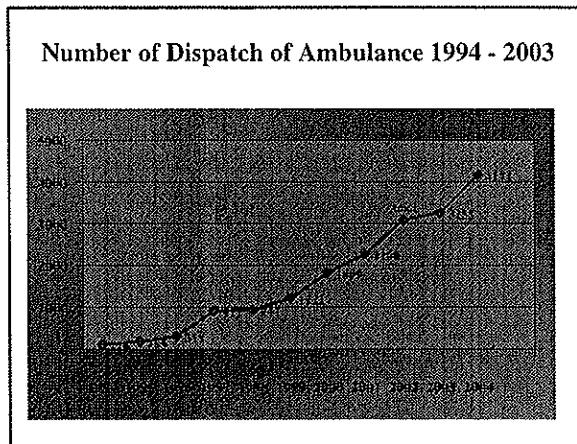
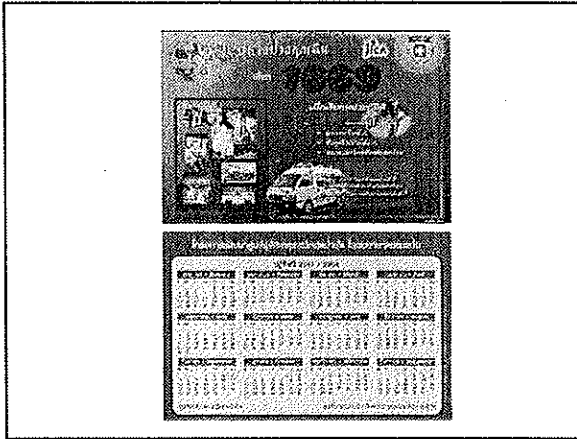
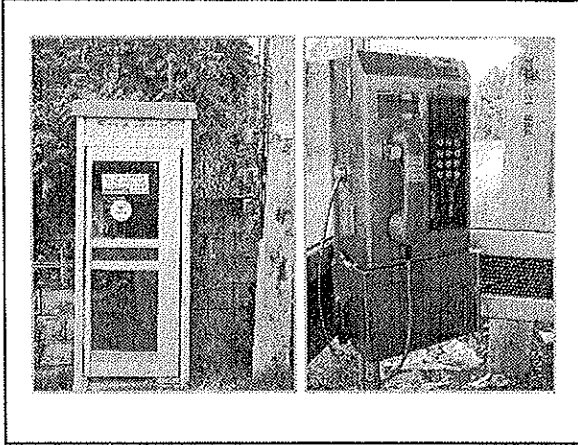


1. Public Relation

2001 - 2005

- Include into the part of PR in output 3





**Number of Dispatch of Ambulance
Khuu Kuen Hospital 2003**

	Jan	Feb	Mar	Apr	May	Jun
2003	250	215	216	212	178	230
2004	369	366	336	310	304	372

	Jul	Aug	Sep	Oct	Nov	Dec
2003	220	262	253	274	293	320
2004	378	366	355	348	348	331

2. Command Control Center

2001

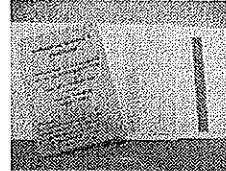
- Set up Command Control Room



2. Command Control Center

2001

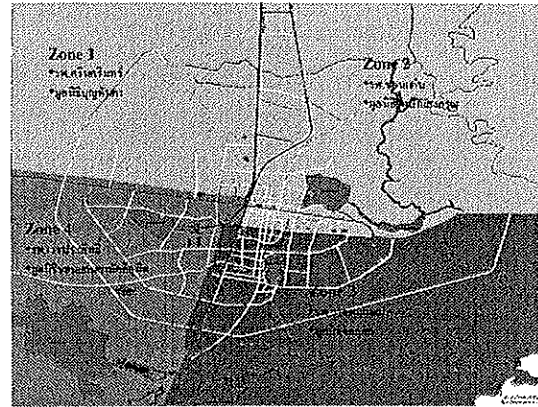
- Survey highway No. 2 (From Pon to Kaosaunkwang)
- Map of public station beside the highway No. 2



2. Command Control Center

2001

- 200 boards to promote 1669
- set up the highway prehospital care



2. Command Control Center

2002

- meeting with director of every district hospital
- Assign Khon Kaen Hospital as Command Control Center of Khon Kaen province

2. Command Control Center

2003

- Survey the main street in every district
- 127 boards to promote 1669 in every districts

2. Command Control Center

2003

- Start service for Command Control Center of Whole Province on July, 2003



2. Command Control Center

2003

- Survey the main street in every district
- 127 boards to promote 1669 in every districts



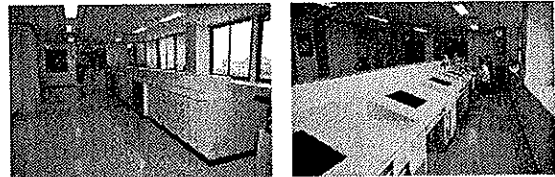
2. Command Control Center

2004 – 2005

- survey highway No. 12 (From Muang to Chumpae district)
- 128 boards to promote 1669 in highway No. 12
- Set up new CCC

2. Command Control Center

- Set up new CCC 2005



3. Substation

2001

- Set up substation at Samran public health center



3. Substation

2003

- new equipment
 - 2 glucometer
 - 2 automatic blood pressure
- 2 new Ambulance



**Number of Dispatch of Ambulance
Samran Substation 2004**

	Jan	Feb	Mar	Apr	May	Jun
2003	14	27	26	27	20	28
2004	81	91	84	69	72	106

	Jul	Aug	Sep	Oct	Nov	Dec
2003	26	24	26	56	59	58
2004	90	75	74	70	89	78

**Number of total Ambulance Dispatch
2004**

	Jan	Feb	Mar	Apr	May	Jun
KKH station	284	275	252	241	232	226
Samran	85	91	84	69	72	106
Total	369	366	336	310	304	372
Per day	11.9	12.6	10.8	10.3	9.8	12.4

	Jul	Aug	Sep	Oct	Nov	Dec
KKH station	288	291	281	278	259	253
Samran	90	75	74	70	89	78
Total	378	366	355	348	348	331
Per day	12.2	11.8	11.8	11.2	11.6	10.7

4. Training

2000

- 3 training course for EMT



4. Training

2000

- 3 training course for emergency nurse



- 4 training course for Volunteer



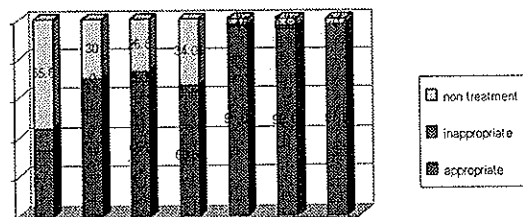
4. Training

2001 - 2005

**Include into the part of
Training in Output 4**

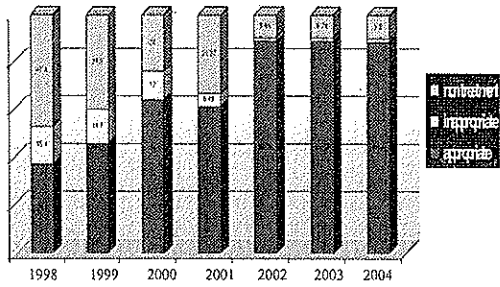
Result of evaluation treatment by EMT

Airway



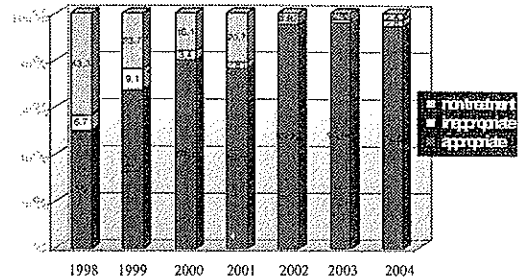
Result of evaluation treatment by EMT

Stop bleeding



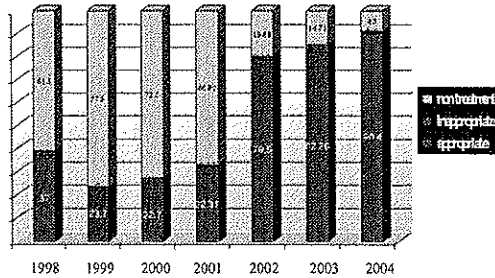
Result of evaluation treatment by EMT

Splint



Result of evaluation treatment by EMT

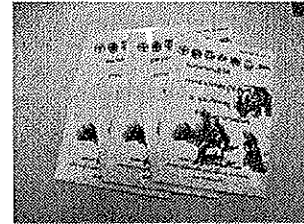
IV fluid



5. EMS & Volunteer guideline

2000

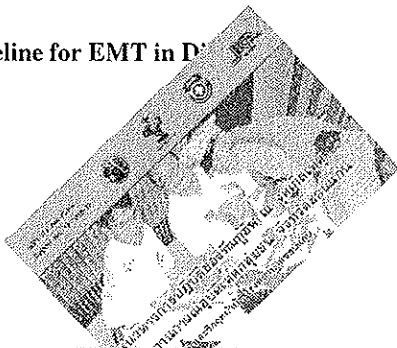
- guideline for Pre – hospital care in Khon Kaen Province



5. EMS & Volunteer guideline

2002

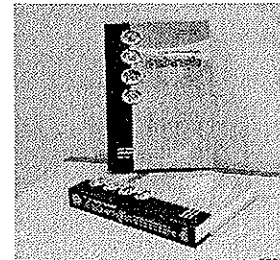
- guideline for EMT in D...



5. EMS & Volunteer guideline

2003

- produce the first EMT Textbook in Thailand



6. District – level pre – hospital care

2002

- set up the provincial EMS Committee
- Assign Khon Kaen Hospital as Command Control Center of Khon Kaen Province
- set up training course for personal of district hospital

6. District – level pre – hospital care

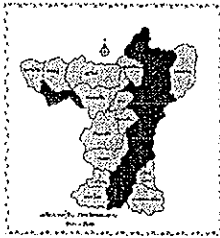
2003

- start the pilot project of EMS development in 7 province on July 11, 2003



6. District – level pre – hospital care

- 21 districts
 - 25 official Ambulance station
 - 3 private Ambulance station



6. District – level pre – hospital care

- 2004
 - Meeting with head of every Tambon in Muang district
 - Start for EMS Tambon on August 11, 2004

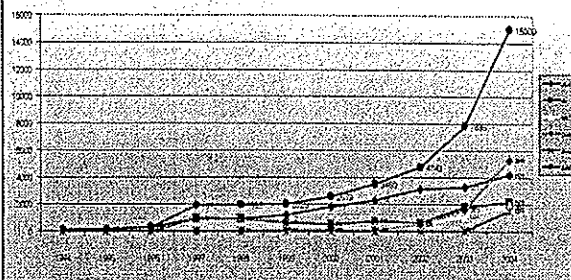


6. District – level pre – hospital care

- 2005
 - 31 Official ambulance stations
 - 11 Private ambulance stations
 - 18 Sub district ambulance stations

6. District – level pre – hospital care

No. of Mission
Ambulance mission, Khon Kaen



Subproject 3

Traffic Injury Prevention

Khon Kaen Provincial Safety Committee

Objectives

- Rise the general awareness for injury prevention
- Promote helmet and seat belt use
- Minimize traffic injury problem

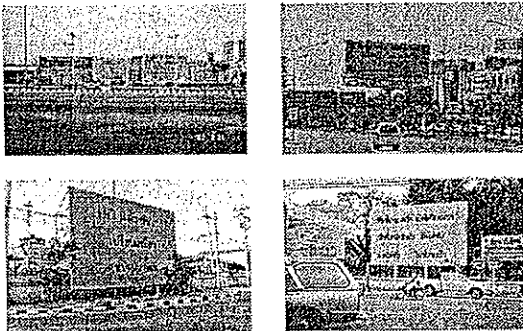
Activities

- Education
- Environment Improvement
- Law Enforcement

Education

- Public Relation
- Education and Training

1. Public relation board on the main road



2. Press conference



3. Traffic Injury Prevention Campaign during Festival

- Public relation and education
- Law enforcement by alcohol checkpoint
- Participation of Community

3.1 Traffic Injury Prevention Campaign during New Year Festival

Injury and Death Rate from Traffic Injury During New Year Festival (7 days)

	2001	2002	2003	2004	2005
Injury Rate	61.7	50.7	57.1	64.8	31.7
Death Rate	1.2	1.3	0.9	1.2	0.7

(per 100,000 population)

3.2 Traffic Injury Prevention Campaign during Festival

Injury and Death Rate from Traffic Injury During Songkran Festival 12 – 17 April

	2001	2002	2003	2004
Injury Rate	54.6	59.5	61.1	37.6
Death Rate	1.4	0.9	0.7	1.1

(per 100,000 population)

Injury Prevention Training at Khon Kaen Hospital

Year 2000 – Feb 2005

10,500 students including teachers were trained in Khon Kaen Hospital



Riding Training and Driving License Examination

Year 2000 – Feb 2005

There were 4,061 students attended the training



Traffic Injury Prevention in School



Traffic management in school



Exhibition in school

Evaluation

Injury Rate from Traffic Accident in Students 2000-2004

School	2000		2001		2002		2003		2004	
	Total No. of Student	No. of Injured Student	Total No. of Student	No. of Injured Student	Total No. of Student	No. of Injured Student	Total No. of Student	No. of Injured Student	Total No. of Student	No. of Injured Student
Northeastern Technology College	8,700	75 (0.9%)	8,200	51 (0.6%)	8,300	55 (0.7%)	7,854	63 (0.8%)	7,783	58 (0.7%)
Khon Kaen Business College	1,514	12 (0.8%)	1,950	3 (0.1%)	2,000	7 (0.3%)	2,674	6 (0.2%)	2,919	11 (0.4%)
Kaennakhon Wittayalai	3,618	70 (1.9%)	3,979	51 (1.3%)	4,218	10 (0.2%)	4,161	38 (0.9%)	4,753	5 (0.1%)

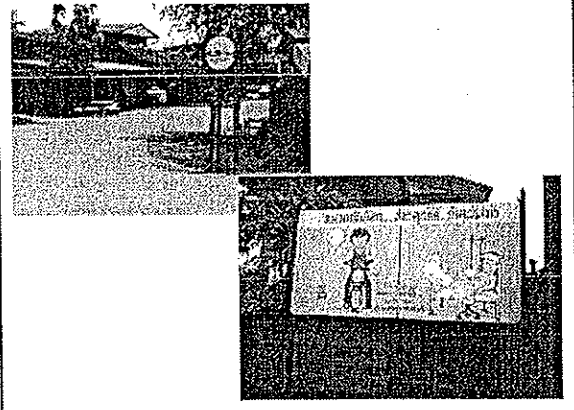
In this year, the School Model (Kaennakhon School) was extended to other schools in Khon Kaen Province. Teachers and students were trained and visited to Kaennakhon School and Khon Kaen Hospital



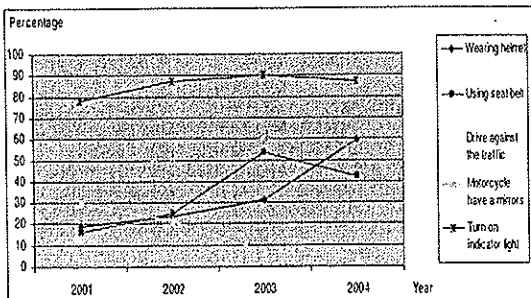
Training for Community Volunteer

Objective

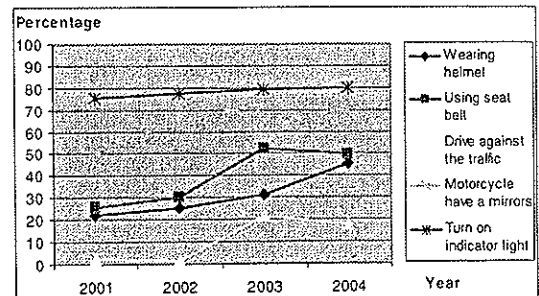
- Motivate volunteer to be aware of the seriousness of traffic injury
- Create the cooperation of community volunteer for the injury prevention



Ban Samran Village



Ban Tum Village

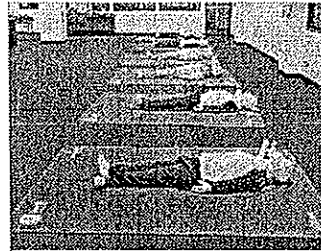


Subproject 4 Training Center

Aksorn Pulnitiporn



Training center established in 2000



Training courses in 2000

year	Course	No.of courses	Participant	No.of participants
2000	- BLS	39	Health care provider	1,043
	-ACLS	5	Doctor & nurses	114
	total	44		1,157

Training courses in 2001

year	Course	No.of courses	Participant	No.of participants
2001	-BLS	33	Health care provider	791
	-BLS trainer	3	Health care provider	67
	-ACLS	2	6 th year medical student	47
	-ACLS for trainer	1	Health care provider	22
	-1 st responder	2	Volunteer	53
	-ATLS	1	Physician	15
	-EMT	2	EMT student	32
	-EMT Nurse	1	Registered Nurse	20
	-Critical care	1	Health care provider	250

Training courses in 2002

Year	Course	No.of courses	Participant	NO. Of participants
2002	-BLS	24	Health care Provider	501
	-BLS for trainer	4	Health care Provider	89
	-ACLS	2	6 th year medical student	62
	-1 st responder	12	Health care Provider and worker	376
	-EMT	2	EMT student	84
	-EMS Nurse	3	Registeed Nurse	90
	-First Aid	2	Volunteer	60
	-First Aid for trainer	1	Volunteer	50

Training courses in 2003

year	Course	No.of courses	No.of participants
2003	-BLS	14	274
	-BLS for trainer	1	31
	-ACLS		
	-EMT	10	343
	-Critical care conference	1	163
		1	195
	total	27	1,006

year	Course	No.of courses	No.of participants
2003	- BLS	10	309
	- BLS for trainer	2	54
	- ACLS	6	170
	- First responder	10	302
	Total	28	835

Year	Total no.of courses	Total no.of participants
2000	44	1,157
2001	46	1,297
2002	50	1,312
2003	27	1,006
2004	28	835
total	195	5,607

research
2002

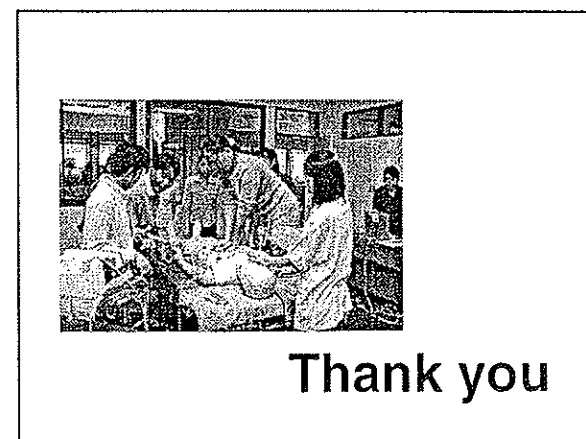
- CPR outcome in KKH after 100% staff trained
- CPR Performance evaluation at Khon Kaen Hospital

research
2003

- Comparison between video instruction guide and instructor for BLS training

research
2004

- Effectiveness of Thai CPR Telephone Instruction for Layman in A Simulated Cardiac Arrest



*Subproject 5
Model generalization*



◆ *Speaker, Consultant, Visitation*

	2000	2001	2002	2003	2004
Speaker	14	17	24	28	23
Member & Consultant	4	2	3	16	18
Visitation	20	13	11	12	12
Training				8	5

Report, Publication and Media

	2000	2001	2002	2003	2004
Reports	9	14	20	17	24
Pamphlet (type)	4	4	2	1 (300,000)	3(90,000)
Stickers	6	-	-	3 (90,600)	4(8,000)
Guidelines	1	-	-	-	-
Poster	4	-	-	1 (160)	4(248)
Card	-	1	-	-	1(5,000)
VDO	-	4	-	3	-
Radio Program	-	2	1	2	2
Cutout	-	-	4	6	8
Traffic Signs	-	91	114	1 (400)	1(128)
Tape	-	-	-	1 (400)	-
CD	-	-	-	2 (1,300)	2(5,000)
Calendar	-	-	-	1(200)	-

30 Dec. 2000



**Permanent Secretary, MOPH
visited Trauma Center**

10 May 2001



• **Mrs. Sudarat Keyurapan, Minister of
Public Health visited Trauma Center**

7 Jun. 2001



• **Dr. Surapong Suebwonglee, Deputy
Minister of Public Health visited Trauma
Center.**

23-26 Jan. 2002

- Presentation Country profile on injuries
A template for development of national program on injury prevention in SEA.
In Inter-country consultation on Development of Regional Strategy for Prevention of Injuries in SEA. held by SEARO 23-26 Jan. 2002, Bangkok - Khon Kaen

23-26 Jan. 2002



In Inter-country consultation on Development of Regional Strategy for Prevention of Injuries in SEA

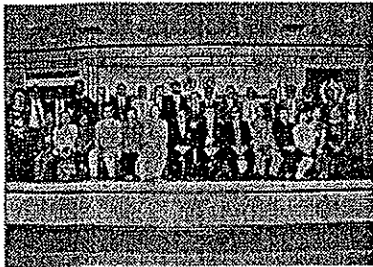
25 Jul 2002

- Speaker: - Topic "Inclusive Trauma Care System" in 27th Scientific Conference – Critical Care in Surgery, Royal College of Surgeon of Thailand, 24 – 26 July 2002. Ambassador City Hotel, Pattaya

7-9 Oct. 2002

- Presentation:- topic" Child injury in Khon Kaen" and "Child injury prevention program in Khon Kaen " in International conference on Capacity Building for Child injury prevention held by The Alliance for Safe Children (TASC), Global Child Injury Prevention Foundation, Bangkok, Thailand

2-5 Dec.2002



- International Training program for injury surveillance held by Khon Kaen Hospital, SEARO, WHO, Khon Kaen.

7 Mar.2003

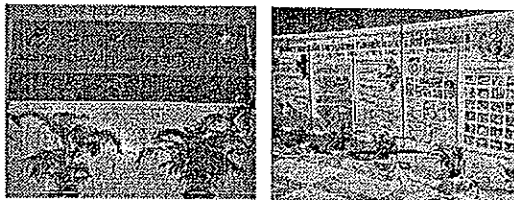


- Deputy Prime Minister, Mr.Jaturon Chaisaeng visited Trauma Center

17-18 Mar.2003

- Presentation “ Report on traffic injury prevention in Khon Kaen Province” and “ Impaired drinking driving” in 3rd GRSP Asian Seminar at the UN

21 May 2003



- Trauma Center had been designated as WHO Collaborating Center for Injury Prevention and Safety Promotion

2-4 Jul.2003



- WHO Consultant on Inter Country Consultation for Pre Hospital Care development. In Ahmedabad, India.

27 Aug. 2003

Lecturer in “Situation of Traffic Injury in Thailand” for the members in “Student against Drinking Driving” from 19 universities at Supachalasai National Stadium organized by Intensive Development the Quality of Life Association

27 Aug. 2003



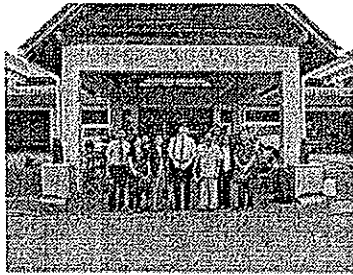
1st “Student against Drinking Driving” Meeting

10 Oct.2003



- Trauma Excellent Center Committee Chaired by Dr.Samai Kaowichit visited TCC

14-17 March 2004



- Technical exchange program to Vientiane, Laos for field study and survey the situation of traffic injury in Laos.

8-12 Aug.2004



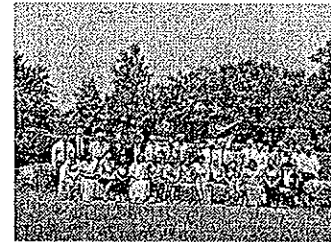
- Technical exchange program to Cambodia for field study and survey the situation of traffic injury in Cambodia

12-16 Sep.2004



- Technical exchange program to Hanoi, Vietnam for field study and survey the situation of traffic injury in Vietnam.

5-7 May.2004



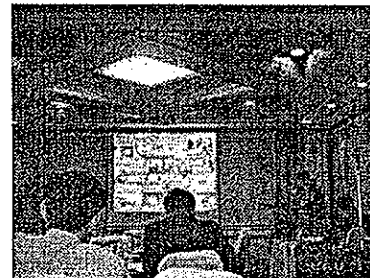
- Participated in Intercountry consultation on Strengthen of Injury Prevention and Control in Medical and Nursing Education Program in Countries in SEAR organized by SEARO, Haryana, India.

6-9 Jun.2004



- Participated in 7th world conference on injury prevention and safety promotion and 5 poster presentation in the conference Vienna, Austria

31 Jul.-2 Aug.2004



- Academic Conference Royal College of Surgeon, Thailand, Pattaya, This paper won GSK award.

11 Aug.2004



- Opening ceremony for initiation of sub district EMS Khon Kaen province

8 Dec. 2004



- Team researcher from Tokyo University visited Trauma Center.

31 Jan – 11 Feb 2005



- International training for Pre hospital care

31 Jan 2005

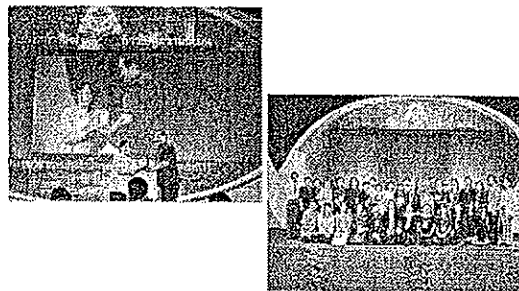


- Opening ceremony of Safety corner

National Seminar on Traffic accident



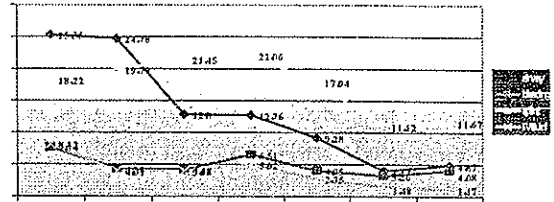
Annual academic conference of MoPH



Overall Outcome in 2005 - 2000

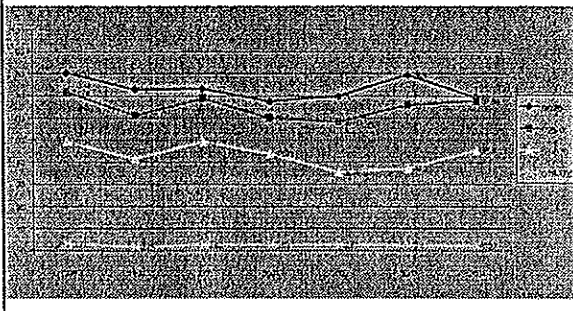
Subproject 1 - Trauma service

The performance of district hospital in the referral process.
Procedure which needed but did not performed.



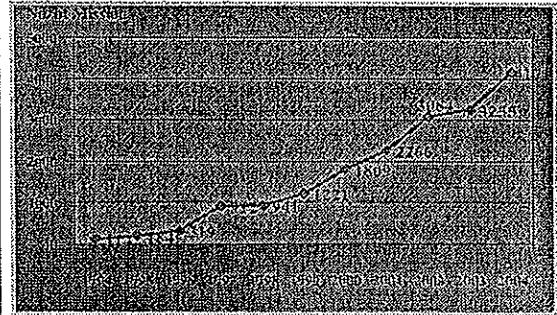
Subproject 1 - Trauma service

Dead rate by severity classified by TRISS



Subproject 2 - Pre hospital care

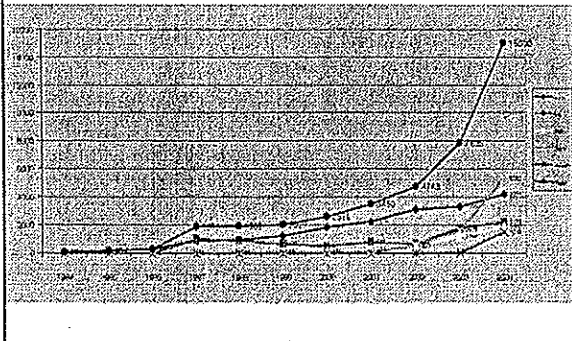
Ambulance mission, Khon Kaen Hospital 1994 - 2004



Subproject 2 - Pre hospital care

Ambulance mission, Khon Kaen

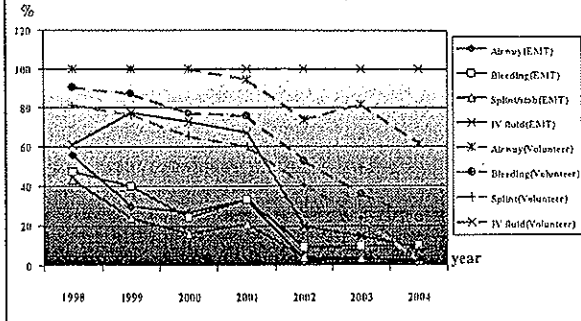
No. of Mission



Subproject 2 - Pre hospital care

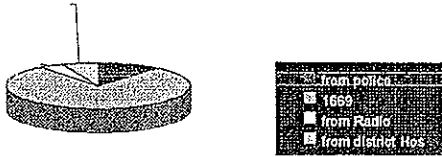
Performance of EMT and Volunteer

Procedure which needed but did not performed



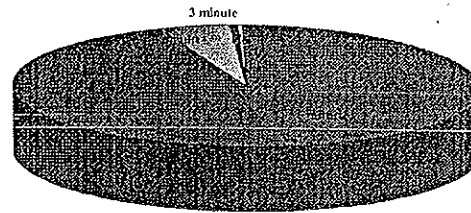
Subproject 2 - Pre hospital care

Source of Call to Command Control Center
EMS Unit, Khon Kaen Hospital, 2004



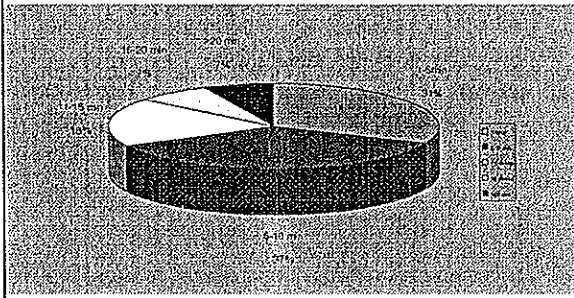
Subproject 2 - Pre hospital care

Response Time
EMS Unit, Khon Kaen Hospital, 2004



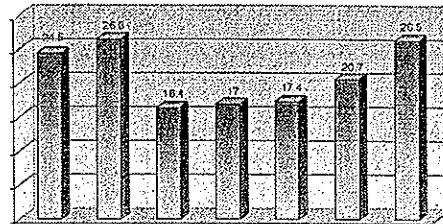
Subproject 2 - Pre hospital care

Time to the scene
EMS Unit, Khon Kaen Hospital, 2004



Subproject 3 - Prevention

■ Helmet used of the injured driver in KK municipality



Subproject 3 - Prevention

■ Alcohol abuse of injured driver in KK municipality



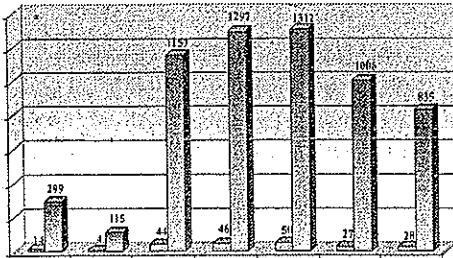
Subproject 3 - Prevention

■ Traffic Mortality rate per 100,000 population in KK



Subproject 4 - Training

■ No. of training courses and trainees



Subproject 4 - Research

■ No of researches.



Subproject 5 Model Generalization

	2000	2001	2002	2003	2004
Reports	9	14	20	17	24
Pamphlet (type)	4	4	2	1 (300,000)	3(90,000)
Stickers	6	-	-	3 (90,600)	4(8,000)
Guidelines	1	-	-	-	-
Poster	4	-	-	1 (160)	4(248)
Card	-	1	-	-	1(5,000)
VDO	-	4	-	3	-
Radio Program	-	2	1	2	2
Cutout	-	-	4	6	8
Traffic Signs	-	91	114	1 (400)	1(128)
Tape	-	-	-	1 (400)	-
CD	-	-	-	2 (1,300)	2(5,000)
Calendar	-	-	-	1(200)	-

Impact of International Organization

- June 2001 MOPH announced EMS as national policy
- May 2002 MOPH executed Excellent Center in 3 area :- Trauma, Cardiac, Cancer
- July 2003 RTG announced traffic injury prevention as national agenda

Impact of Local Government

- July 2003 Pilot model in developing EMS in 7 provinces with budget supported
- November 2004 MoPH announced for developing EMS in every province

TCC played major role in the involvement of establishing plan and implementation in every national policy

Khon Kaen Model in Injury Prevention and Control

- Comprehensive Model in every aspect of Trauma System including Injury Prevention, Pre hospital care, Trauma service and Injury information system

