# The new trend of risky group on all roads in Thailand, 2009

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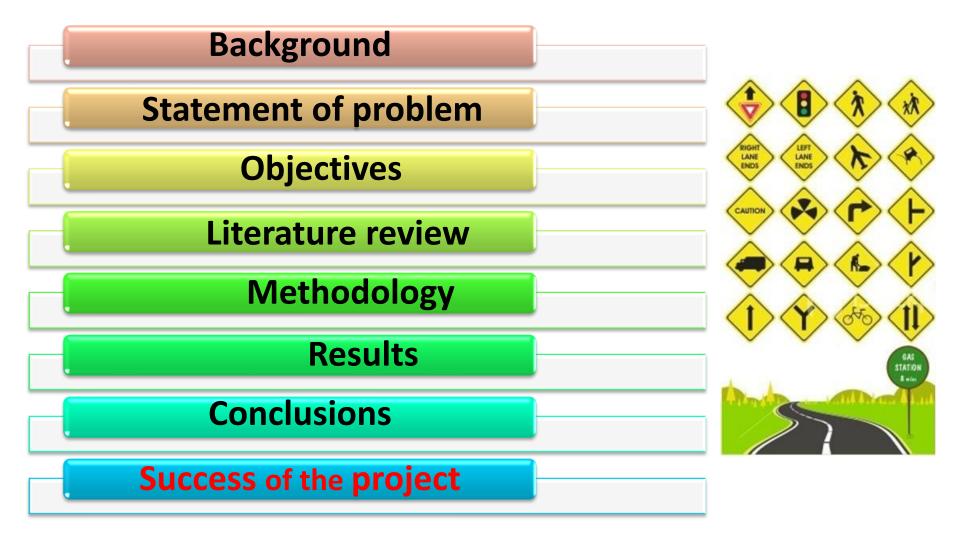
Transportation engineering field Asian Institute of technology (AIT)



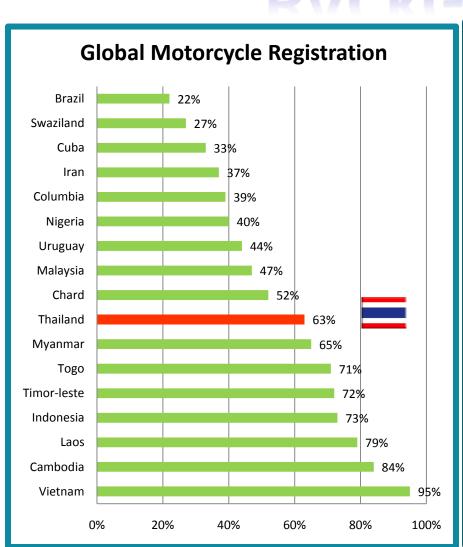


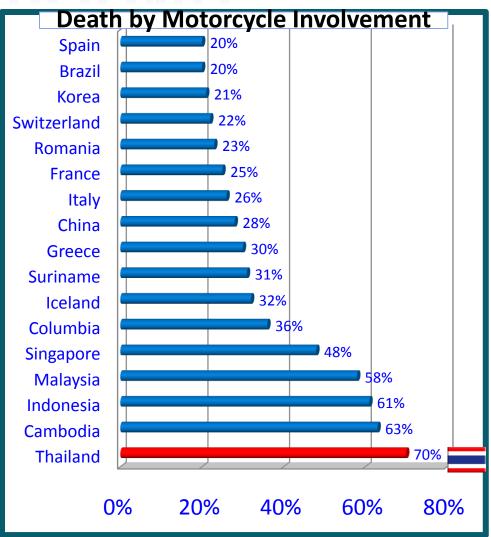
Ministry of Public Health Thailand Road safety Thai organization Thai Health Promotion Foundation

#### **Presentation outline**



# **BACKGROUND**

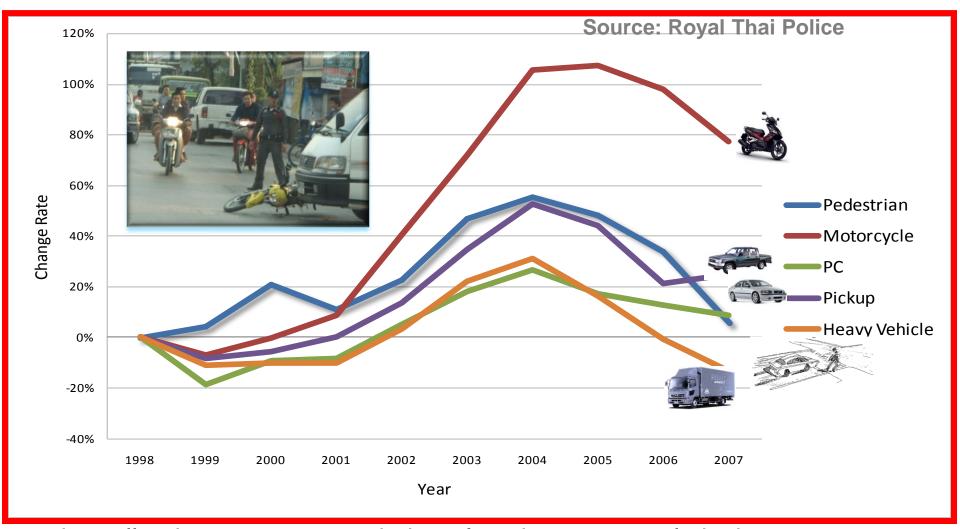




Source: WHO (2009)

#### **BACKGROUND**

# Road Accident Change Rates (since 1998)



they all point out one very obvious fact that motorcycle is the most vulnerable mode of transport to have the road accident in Thailand.

# **BACKGROUND**

# **Thailand Accident Statistic 2000-2009**



Total: 101,204 accidents/year

Highways: 14,928 accidents/year

15%

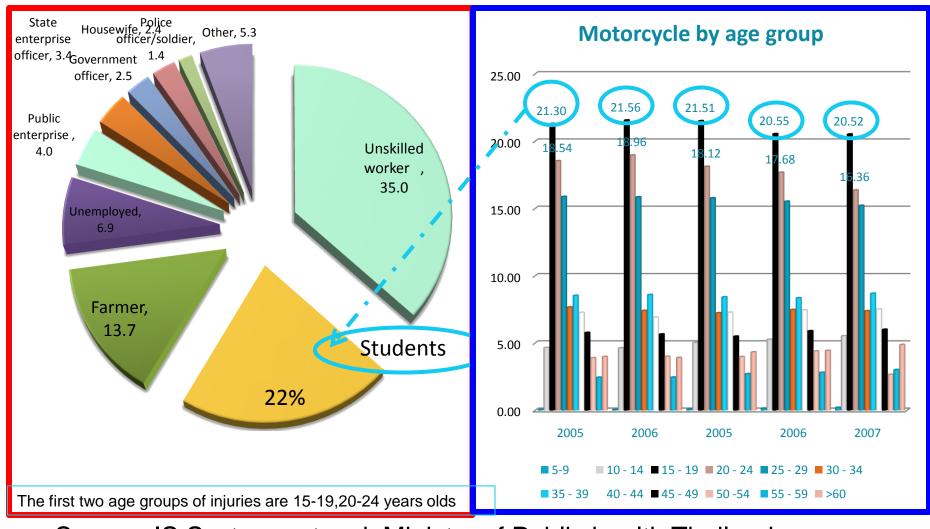
Total: 12,824 fatalities/year

Highways: **2,071** fatalities/year

16%

Most accidents occur on the minor roads?

# Statement of problems



Source: IS System network Ministry of Public health Thailand

# **Statement of problem**

**YEAR 2009** 

Year	All Year	During New year festival	During Songkran Festival
2003	14,446	562	848
2004	13,766	628	654
2005	12,871	469	522
2006	12,693	441	485
2007	12,492	449	361
2008	11,561	403	368

Cause of accident 71,806

- (1) Over speed limit 17,278 (24.06%)
- (2) Cutting in at close range 14,202 (19,77%)
- (3) tailgating 7,391 (10.29%)
- (4) Dangerous over taking 6,919 (9.63%)
- (5) Drink drive 5,472 (7.62%)

Type of Vehicle Involve 163,452

- (1) M/C 68,140 (41.69%)
- (2) PVC 40,687(24.89%)
- (3) Pickup28,822 (17.63%)
- (4)Taxi 6,983 (4.27%)

Type of Road

- (1) Highway /Toll road 32.03%
- (2) Rural Road 67.97%

Source: royal Thai police record



#### How to address the young rider problems?

Type of license	Number
Temporary	4,292,421
1 year	2,170,363
5 years	5,009,977
Lifetime	6,000,904
Total	<u>17,473,665</u>

# How graduated licensing does, or doesn't (Effectiveness of newly Graduated Motorcyclist?



# **Statement of problem**

#### How all motorcyclist learned to rise?



How all of riders get in to the licensing process?



# **Objectives**

- To examine early motorcycle riding related to experience of newly licence riders.
- To determine their impact on subsequent negative related outcomes (Accident, injuries and risky riding behaviors)
- To Identify specific area that can be targeted to traffic related injuries among the high risk group.
- To examine traffic related experience of newly motorcycle's licenced riders
- To Identify the impact of programs of young riders on riding behavior outcomes.

#### Literature review



#### Rider's license

#### Minimum age

Age >= 15 years old

For temporary license is permitted for <= 110 cc.



#### How to obtain?

- 1. By taking the examinations at Land Transportation Authority Office
- 2. By entering a designated riding school





#### Literature review

#### Riding training school in Thailand

- 1. 14 schools (Honda: 10, Yamaha:1, Others:3)
- 2. Price: 500 Bor 50£
- 3. Lecture course: at lease 5 hours















## Licensing process by land transportation authority office

Attend 2 hours law lecture



70% Technical skill exam passed



70% E-exam passed



Licensing process registry fee 55 ₿ or 1 £



#### Literature review

#### Safety riding program and RTI

Country	Age	Course	Duration	Accident
Thailand	15 y	License Trainers	15 hours 5 days	Decrease 30% Tend to decrease
Australia	18/18y 3 m	Pre-learner License	9, 12 hours 6, 8 hours	Not improve attitude, riding skills, and safety
New Zealand	15/16y 6 m	Pre-learner Provisional Full license	Voluntary	Decrease 22%
England	17 y	Full license	9-12 hours	Tend to decrease
USA	14/20	Pre-learner Intermediate Full license	40 hours No No	Decrease 25%







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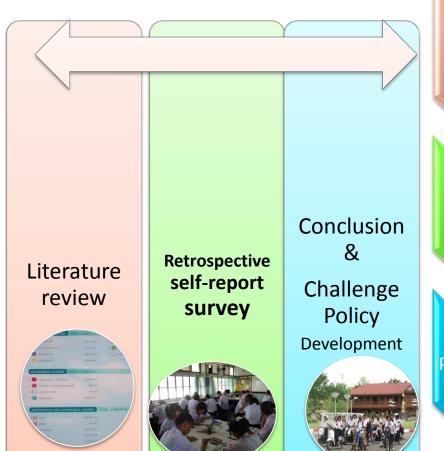
Road safety Thai.Org







# Methodology



Pre-licensing •

- Traffic knowledge
- Riding Skill

Licensing process

process

- Written test
- Practical riding test

Post-licensing process

- Young rider experience
- How to control them?

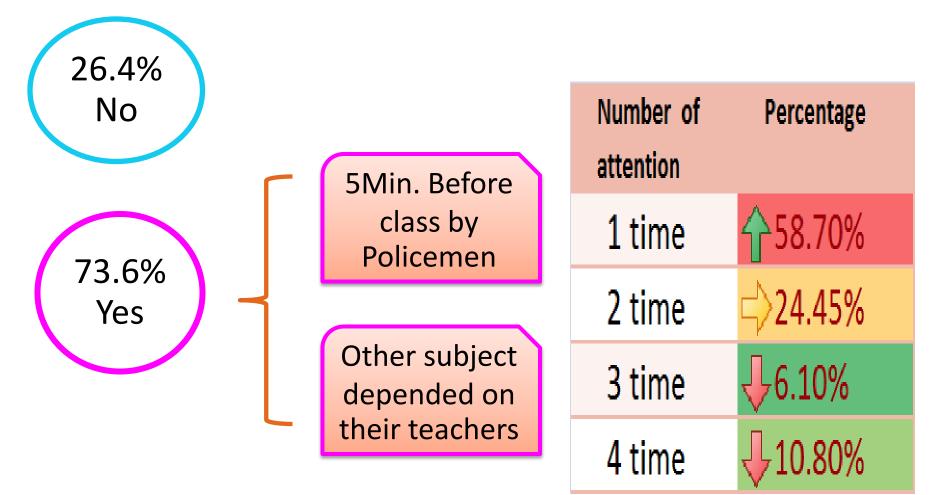
#### **General Result**

# Totally, 1,238 students 58.35% male. From university, High school and Technical school

Type of driver 's licence	Male	Female	%
Riding with out licence	262	229	39.7
Licence expired	79	58	11.1
Probation licence (1st )	207	121	26.5
Fully licence (5 <sup>th</sup> )	174	106	22.6
Lives time licence			

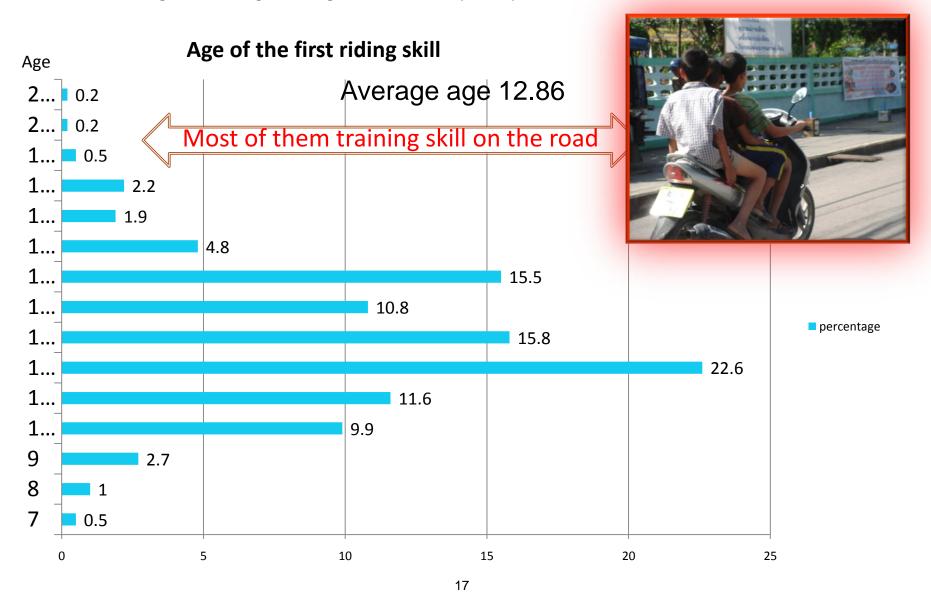
# Pre – licensing process Result

A part of safety knowledge programs in school for Young Newly Licensed Riders



# Pre - licensing process Result

Before age of beginning's licence (15Y)75% of riders ride Mc on all road



# Pre - licensing process Result

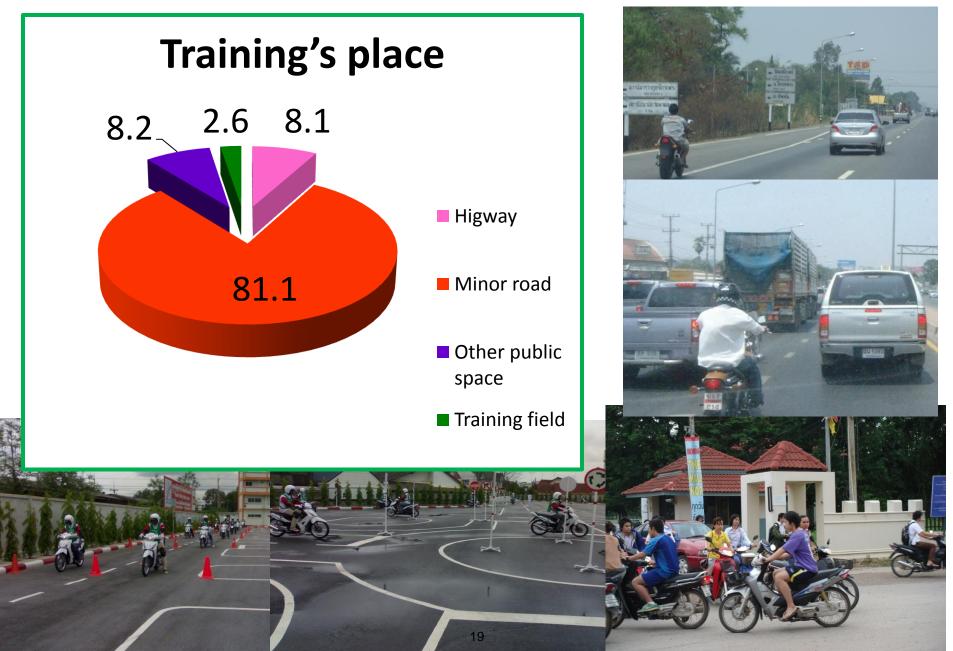
The first skill trainer

		•
The first Trainer	percentage	
Themselves	<b>35.80%</b>	
Parents	<b>1</b> 56.90%	
Friends	4.80%	
Profressional/riding school	2.60%	



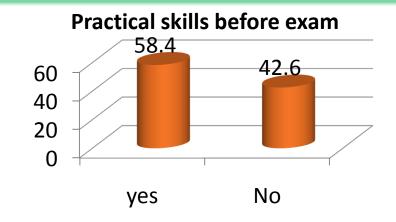


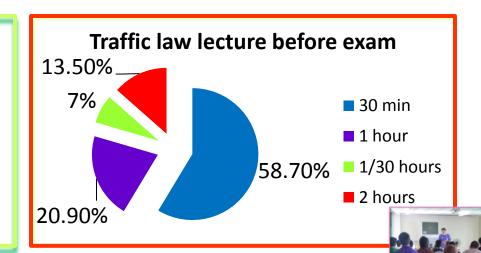
## Pre – licensing process Result

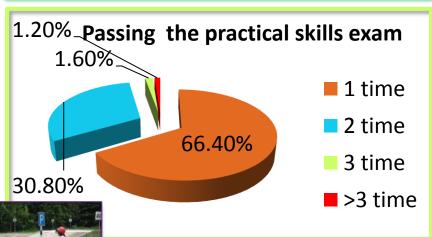


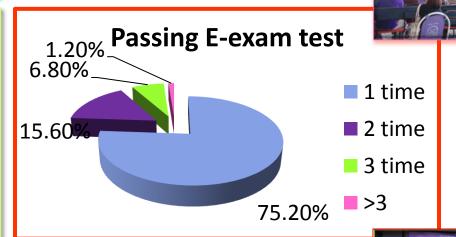


# Licensing process Result









# Post-licensing process result

Experience in riding after having a motorcycle's licence

Stratified by the first trainer riding skill

	The First skill trainers				
Riding condition	Themselves	Friends	Parents	Driving school/ profressional	
Drunk riding	58.08	63.33	49.05	56.25	
Riding on highway	28.87	18.52	31.98	7.14	
Over speed limit	77.39	66.67	60.14	68.75	
Cutting in at close range	79.77	80.00	70.92	75.00	
Night time riding	92.75	100.00	96.69	93.75	
Dangerous over taking	75.29	70.00	68.96	68.75	
Non stop in the beginning of red phase light signal	72.69	73.33	70.21	68.75	
Riding in difference way	82.06	73.33	80.76	75.00	
Wearing helmet	93.51	96.92	100	100	

# Post-licensing process result Driving Experience of Young Newly Licensed Driver

✓ Behavioral survey of 1,238 students; age 15-22

**Finding** 

Experience in accident and injury					
First trainer	Male (5	8.3%)	Female (41.7%)		
	Accident	Injury	Accident	Injury	
Themselves	63.0%	81.3%	59.7%	64.7%	
Friends	72.7%	82.8%	64.3%	76.9 %	
Parents	62.5%	68.5%	58.4%	62.6%	
Driving school/ Professionals	52.9%	64.2%	57.7%	60.9%	

# Post-licensing process result

All processes of post licensing control systems are failure from data linkage between police's network and land transportation authority network.





#### 1. Problem

•The traffic knowledge in normal school isn't available no pattern of course.

#### Recommendation

•Should be develop a systematic safety knowledge programs in normal school for improving safety behaviors and a safety conscious for all newly rider.





#### 2. Problem

- . Riders who learn by themselves or by their friends which the first training age less than 15 years old are risky group in both male and female rider
- . The experience in accident and injury are smallest in rider who learns by professionals in a safety driving school.

#### Recommendation

• More riding school or riding practice should be provided at least one school for one community and stick in the age of beginning riders.







#### 3. Problem

•The normal riders age less than 15 years old use motorcycle in daily lives and most of them without motorcycle license.

#### Recommendation

 Enforcement can be used to detect non-license riders on a road.



#### 4.Problem

The processes of post licensing control systems are failure

#### Recommendation

- Should be improving the data system network among police's record and land transportation authority network for controlling newly rider
- Should be control phase in on road riding for post licensing in some restriction such as highway riding, passenger taking ,limit lower speeding
- Scoring control in some condition after paying a fine.
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#### Recommendation

Most of all: The government should pay more attention to develop the process of a safety rider skill.

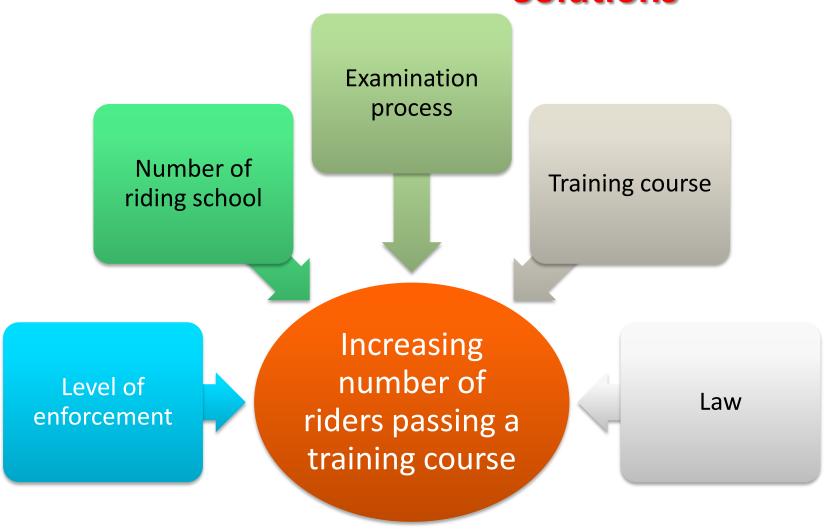
Safety driving school should be a compulsory program for all of the first riders







# Recommendation Solutions



### Introduce the problems by press release and mass media





# Success of the policy development from our project

- Road safety Thai organization
- Thai Health Promotion Foundation Support some budget for Increasing the number of riders passing a training course.
- Minister of Education agreement with this problem and try to develop safety causes in school for young







### Success of the policy development from our project

Land transportation authority office invited our group to develop licensing process system project for improving young motorcyclist for Road safety nation issue in ten years.

Honda safety school develop increasing safety riders passing a training course





# Thank you for our sponsor



Road safety Thai organization

Thai Health Promotion Foundation TGLIP and our partnership.

Thaweesak taekarthonk
Thanapong Jinwong
Porntippa Thammarakchai

Thank you for your kind attention ขอบคุณค่ะ