



ATRANS & IATSS Joint Session

# Data collection on Motorcycle Crashes

23 August 2019  
ATRANS & IATSS



# Agenda

1. Introduction
2. Key note
3. Summary of pre-session
4. Presentation
5. Discussion & Q&A
6. Closing



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# 1. Introduction

**1.35**  
million deaths each year

**8<sup>th</sup>**  
leading cause of death for  
people of all ages

**#1**  
cause of death for  
children and young  
adults 5-29 years of age

**3**  
times higher death  
rates in low-income  
countries than in  
high-income countries

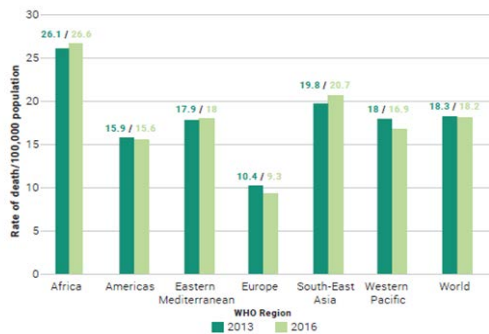
◆ **Seriousness**  
**Number,**  
**Leading cause of death**  
**Young adults**  
**Death rates**

Figure 4: Number of countries where a change in the number of road traffic deaths has been observed since 2013\*

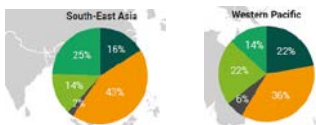


◆ **Middle / Low income countries**

Figure 5: Rates of road traffic death per 100,000 population by WHO regions: 2013, 2016



◆ **South-East Asia**



- Driver / passengers of 4 wheeled vehicles
- Motorized 2-3 wheelers
- Cyclists
- Pedestrians
- Others / unspecified

◆ **Motorized 2-3 wheelers**



# 1. Introduction

**E**ngineering

## **Safety devices as**

- Vehicle technology
- Infrastructure ( signals, signs and surface )
- IT technology

**E**nforcement

## **System, regulation as**

- Driving license
- Penalty / Point system for violation
- Regular inspection on vehicles

**E**ducation

## **For drivers, children / parents**

- Driving school for novices
- Lecture for violent drivers
- 1<sup>st</sup>, 2<sup>nd</sup> grade of primary school children





# 1. Introduction

# Engineering

## Safety devices as

- Vehicle technology
- Infrastructure ( signals, signs and surface )
- IT technology



CBS!

Politicians, governments and activists are apt to insist to introduce safety devices is the **best way** to reduce crashes.

CBS : Combined Brake System

but



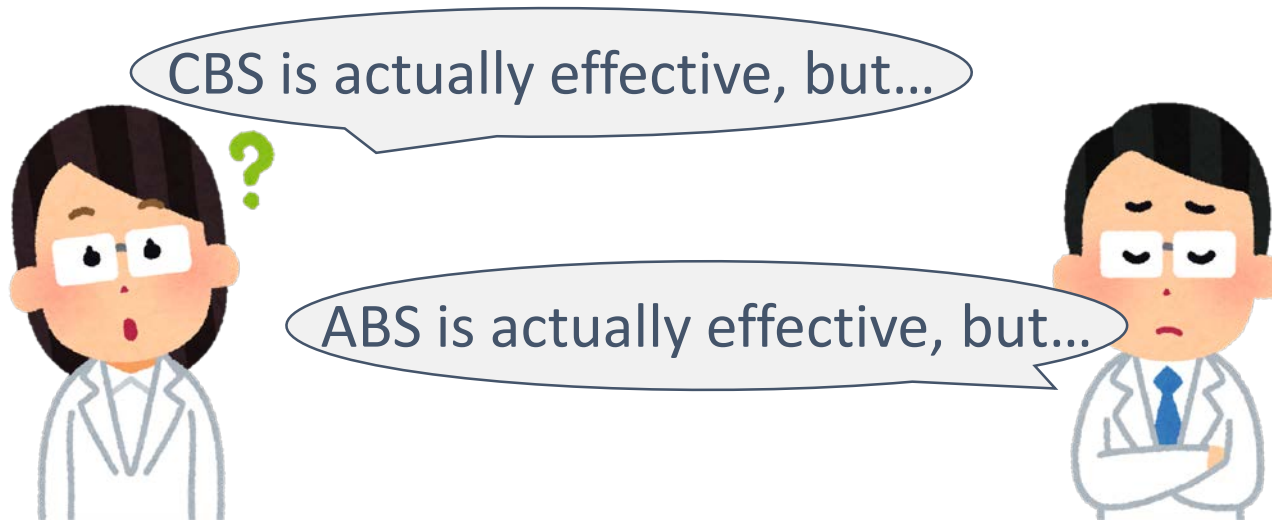
ABS!

A.B.S : Anti Lock Brake System

**It's true and not true.**



# 1. Introduction



Such systems require **cost up**

and

These are effective for full braking from high speed driving.

but

*If crashes occur mainly in low speed?*

*If crashes are mainly caused by drunk drivers?*

*If drivers who cause crashes are novices?*



# 1. Introduction

To find the best method,  
correct data are needed.



- General information:**
- Date, Time, Place, Weather
  - Number of injured, fatalities
  - Type, number of vehicles
- Human:**
- Age, sex
  - Physical condition (drunk, sleep, distracted)
  - Helmet
  - Driving license (type, validity)
- Road, Traffic:**
- Road shape, line, surface condition
  - Signal
- Vehicle:**
- Type, shape, color
  - Safety device
  - Tire condition
- Injury:**
- Cause of death, site/severity of injury
- Rescue:**
- Time of arrival, time to hospital





# 1. Introduction

## ◆ Purpose of the session

- Some countries say that they have already built their own traffic crash data collection / management system.

*Sharing their experience will help others to break through their issues.*

- At the same time, as building such system requires time, each country might have *introduced some countermeasures already*.

To share such information is one of purpose of the session.

## ◆ Participants shared

What kind of data collected

How to collect data

Who manage the data

Past / existing problems

Have you already introduced any countermeasures in low cost?

## ◆ Participants

- AIP Foundation : Ms. Mirjam Sidik, CEO, AIP Foundation, Vietnam
- Thailand : Dr. Phathai Singkham (Department of Disease Control, Ministry of Public Health)
- Sri Lanka : Dr. Niranga Amarasingha, SLIIT Faculty of Engineering Malabe
- Bangladesh : Md. Abu Talab, Center for Injury Prevention and Research
- Malaysia : Prof. Dr. Shaw Voon Wong, Universiti Putra Malaysia
- Philippines : Dr. Ricard G. Sigua, University of the Philippines
- Japan : Prof. Dr. Satoru Kobayakawa, College of Science and Technology, Nihon Univ., IATSS