

Data Collection of Motorcycle Crashes: In Case of The Philippines

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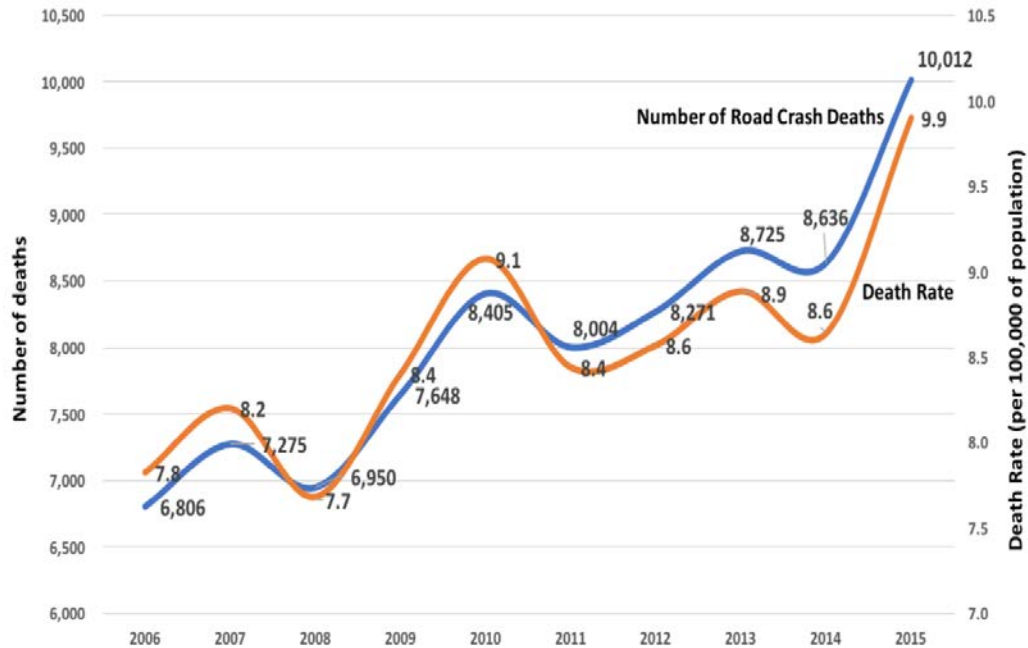
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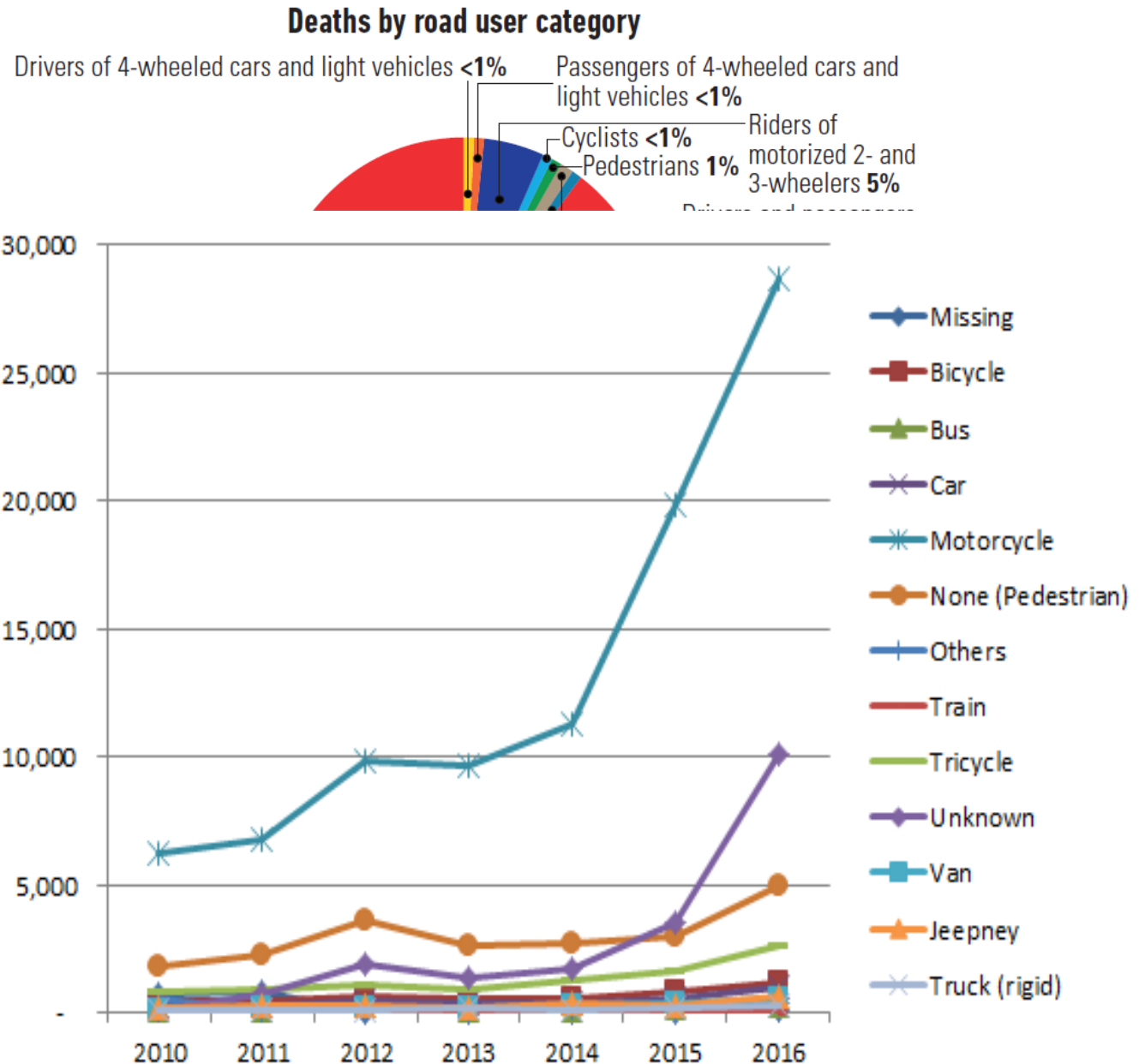
Road crash deaths, Philippines 2016

- 11,300 deaths or 10.92 per 100,000 population (2016)
- 6,800 in 2006



Source of Data: PSA

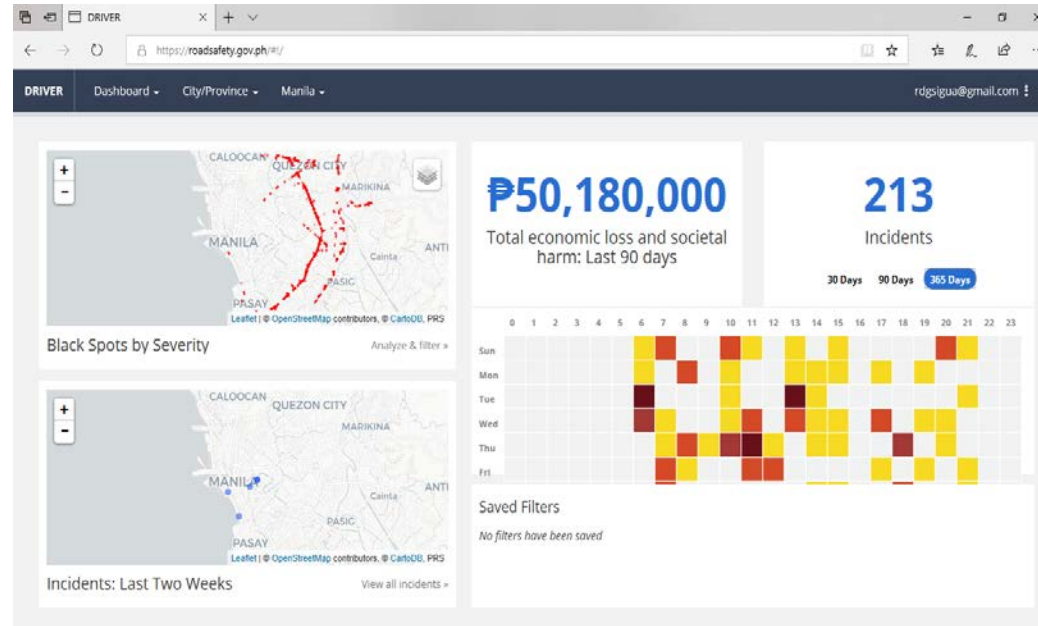
Source: Philippine Statistics Authority



Trends of road crashes in Metro Manila
Source of Data: DOH

DRIVER SYSTEM (Data for Road Incident Visualization, Evaluation and Reporting)

- Web-based interface;
- Companion android application for data entry;
- Automated reporting based on the most common reports across agencies;



ROAD INCIDENT DATA SYSTEM
Incident Reporting

The Philippine Incident Reporting app allows for in-the-field data entry into the Road Incident Data System to capture reports.

Sign-in to account

Contact DOST Support

My Incident Reports

No incidents reported, yet.
Press the **+ button** to add an incident.

Incident Details

WHEN DID THIS INCIDENT OCCUR?
01/01/2015 00:00

INCIDENT TYPE
Traffic Accident

COLLISION TYPE
Head On

MAIN CAUSE OF ACCIDENT
Human Error

WHERE DID THE INCIDENT OCCUR?
25th St and 5th Ave

WEATHER CONDITIONS LIGHT CONDITIONS
Clear Daytime

Breakdown of road crash victims, Metro Manila

- 12 years (2005 – 2016)
- 957,348 records of accidents from MMDA
- Average annual # of fatalities:400

Road Crash victims	No. of Fatalities	%
Pedestrian	2196	45.8
Driver	1946	40.6
Passenger	656	13.7
Total	4798	2.1% of victims incl injured

Mode Interaction

Rank	Mode Interaction	Number of Road crashes	Number of Fatality	Number of Injured
1	Ped-Car	16,199	525	17,434
2	Ped-Truck	2,836	459	2,890
3	Motorcycle-Truck	8,188	363	5,165
4	Motorcycle-Car	82,762	298	35,377
5	Ped-Motorcycle	21,789	279	24,411
12	Motorcycle-Motorcycle	12,368	90	11,504
13	Car-Truck	74,257	88	3,347
20	Car-Car	203,673	50	6,481

Pedestrians and MC riders continue to be the most vulnerable road users in Metro Manila

Road crash locations

	Number of Road crashes	Number of Death
Mid-Block	269,003 (28%)	1,682 (35%)
Junction	95,883 (10%)	367 (8%)
Total (sample)	364,886 (38%)	2,049 (43%)

- **Lack of pedestrian facilities**
- **Uncontrolled lane splitting behavior of motorcycles**

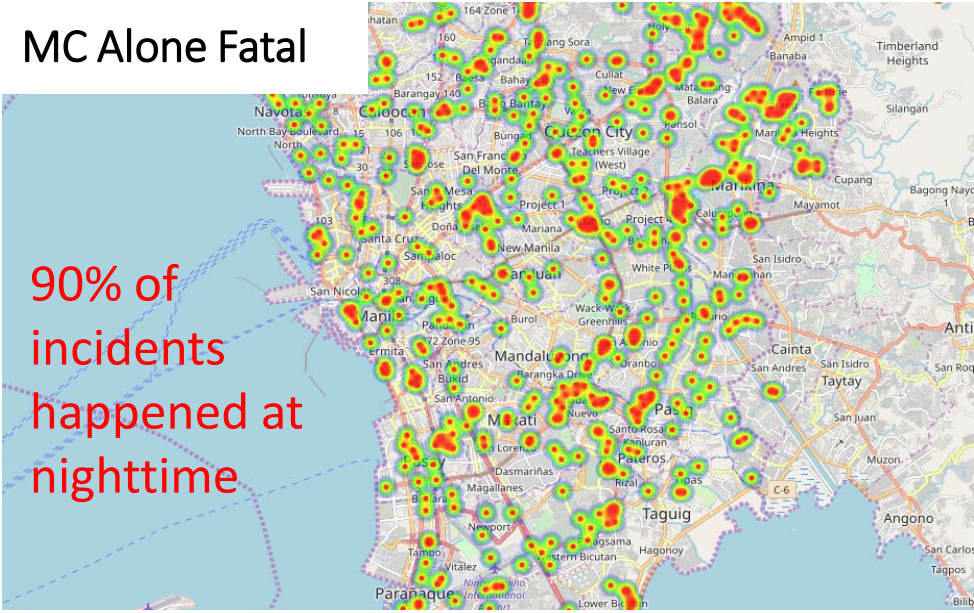
Rank	Junction Control	Number of Accident	Number of Fatality
1	Traffic Lights	43,599	130
2	Other	5,722	64
3	Give Way sign or marking	5,270	26
4	Other (Flyover/Bridge Marking)	432	12
5	Stop sign	45	2
6	School Zone	315	1

- **Low compliance (beating red lights; ignoring signals)**
- **Inadequate clearance intervals**

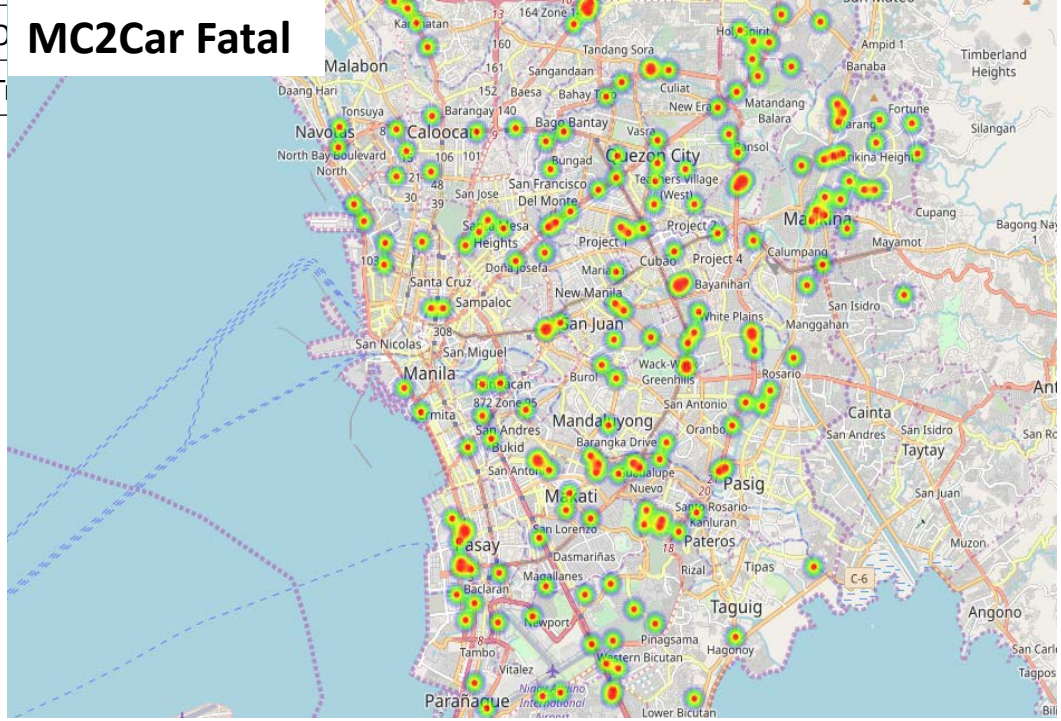
MC Fatal Road Crash

Involved Type	No.
MC Alone	811
Truck	334
Car	280
Jeepney	140
MC	112
Van	97
Bus	83
Taxi	42
Tricycle	36
Bike	30

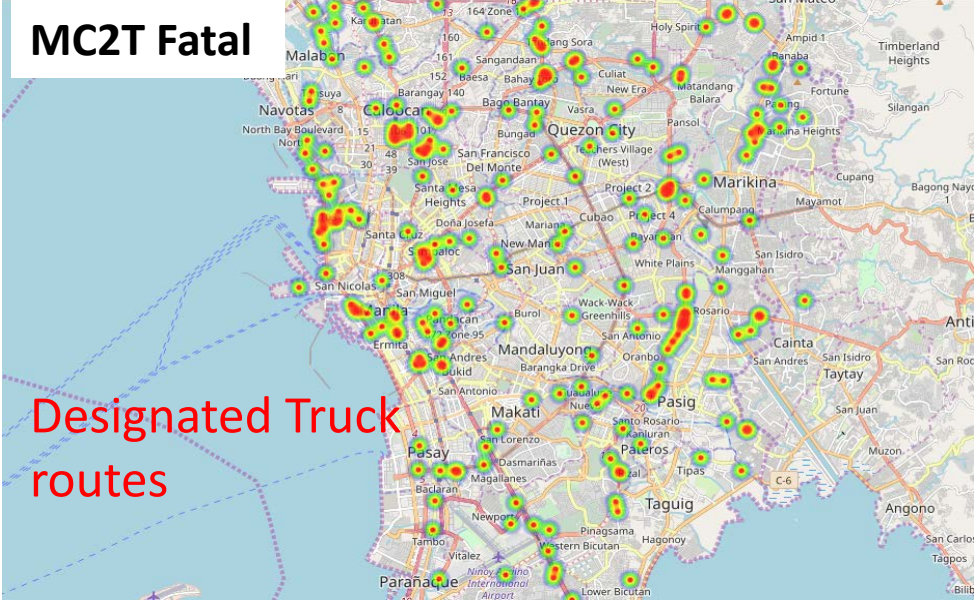
MC Alone Fatal



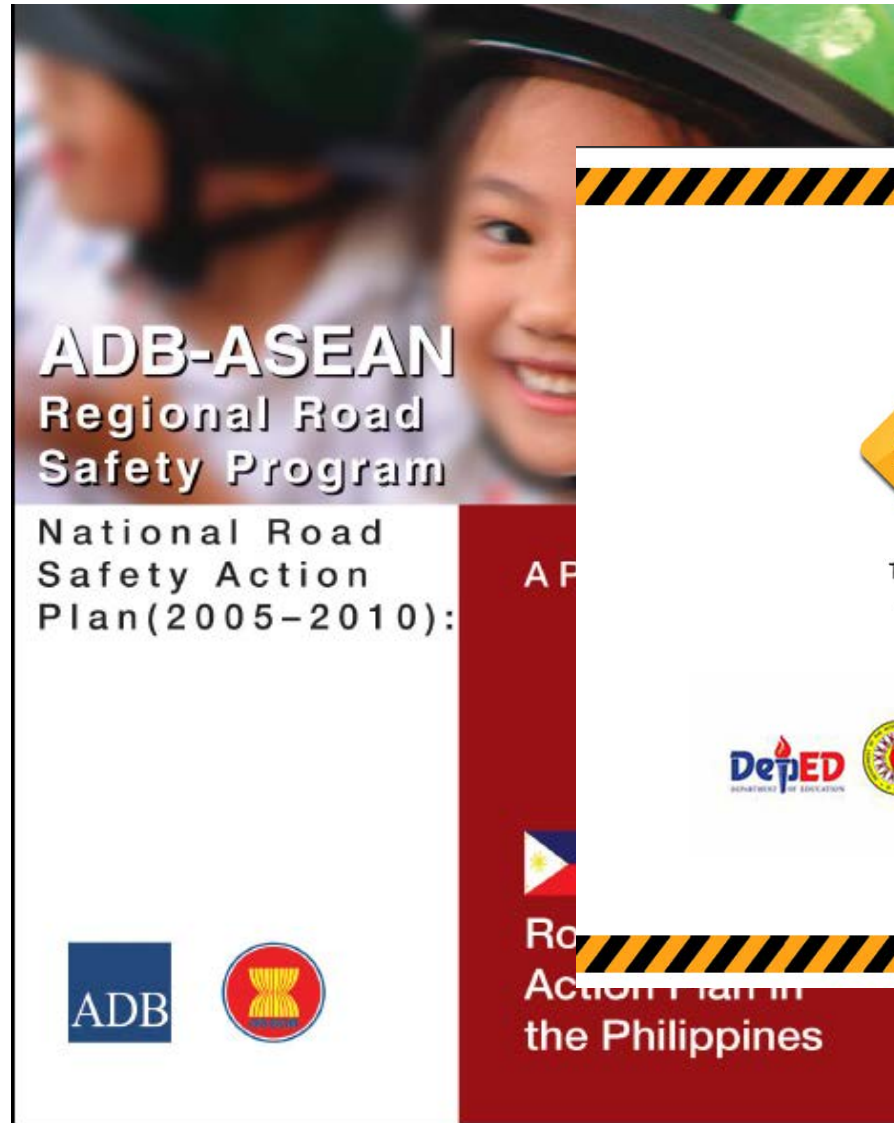
MC2Car Fatal



MC2T Fatal




Philippine Road Safety Action Plans



ADB-ASEAN
Regional Road
Safety Program

National Road
Safety Action
Plan(2005-2010):

ADB



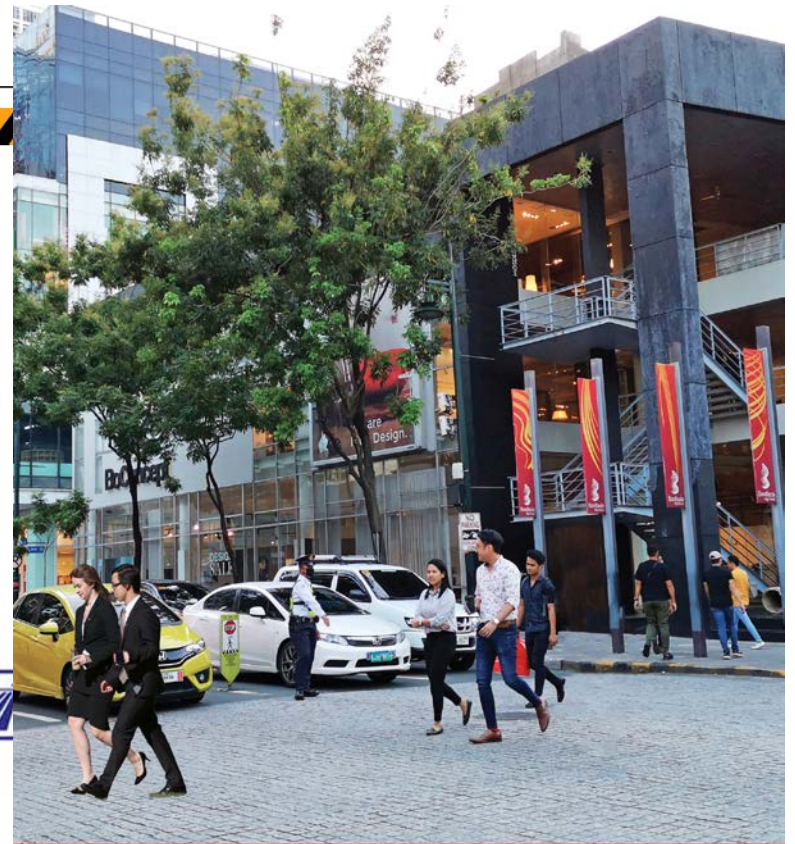
**PHILIPPINE
ROAD
SAFETY
ACTION
PLAN
2011-2020**




Together We Can
Save Millions
of Lives.



Ro
Action Plan in
the Philippines



**Philippine Road Safety
Action Plan**
2017-2022



Current Regulations related to road safety



Motorcycle Helmet Law
(RA 10054; 2010)



Speed Regulations



Seat – belt Law
(RA 8750; 2000)



Child Restraint Law

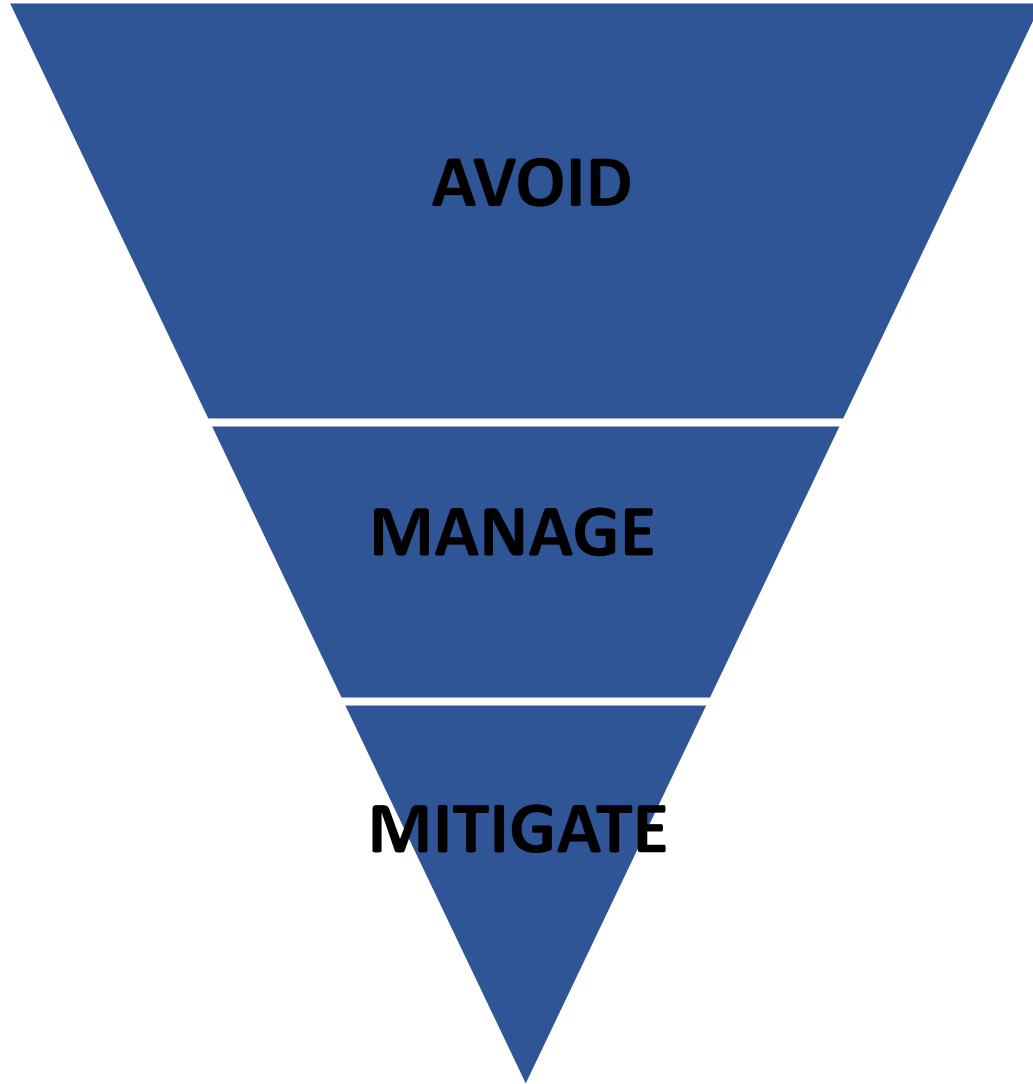


Drink – Driving Law
(RA 10586; 2013)



Anti Distracted Law
RA 10913; 2017

'Saving People's Lives' Mitigation Framework



Identify ways to avoid or reduce negative effects at the early stages	<ul style="list-style-type: none">- promote public transport- TDM measures- V2M or V2I- Exclusive lane for MCs
Includes mostly non-physical changes to traffic operations	Regulate: <ul style="list-style-type: none">- Speeding- Lane filtering/splitting
If effects cannot be entirely avoided or managed, then works may be required to mitigate the said effects	<ul style="list-style-type: none">- Exclusive lane- Intersection improvements

Summary

- Lack of integrated database systems on road crashes → **institutionalization**
- Vulnerable road users motorcycle riders and pedestrians → **warning devices and other facilities**
- Road Safety Action Plans in place → **strict monitoring**
- Major causes of casualties – speeding, lane splitting, ignoring traffic lights, visibility issues, etc. → **strict enforcement; monitoring devices**

Thank you for your attention!