



ROAD ACCIDENTS IN INDIA AND MAJOR CAUSES

AN OVERVIEW



Indian Road Network



2nd Largest Road Network in the World

6.21 Million Kms

64% Movement of Goods & 90% Passenger Tfc

Economic Growth

**Largest Number of Road
Accidents Globally**



Aim

Present an Overview of
Road Accidents in India
and their Major Causes





Preview

**Road Accidents in
India**

**Causes of Road
Accidents**

Recommendations

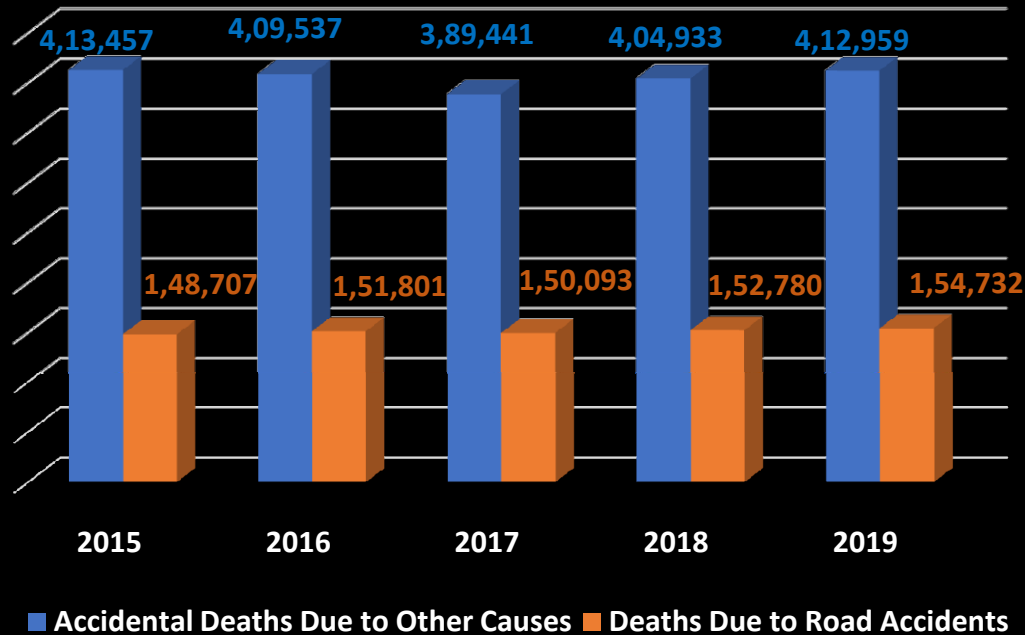




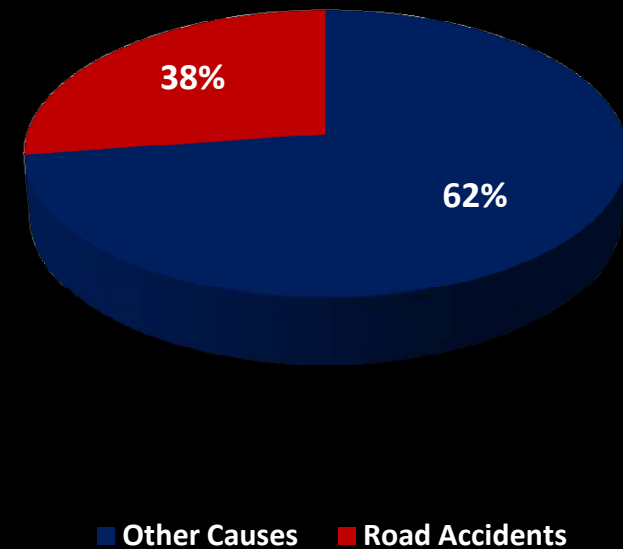
Road Accidents in India



Accidental Deaths in India



Deaths Due to Road Accidents



- NCRB Data – Traffic Accidents Largest Cause of Accidental Deaths
- **85% Traffic Accident Deaths Due to Road Accidents**
- Road Accident Deaths Constant Over 2015-2019. **Range 36-38%**



Global Trends & India



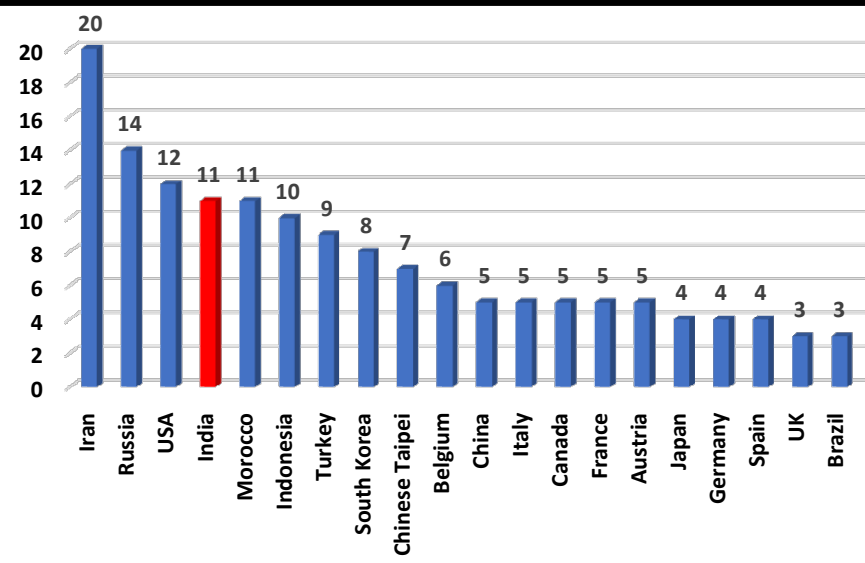
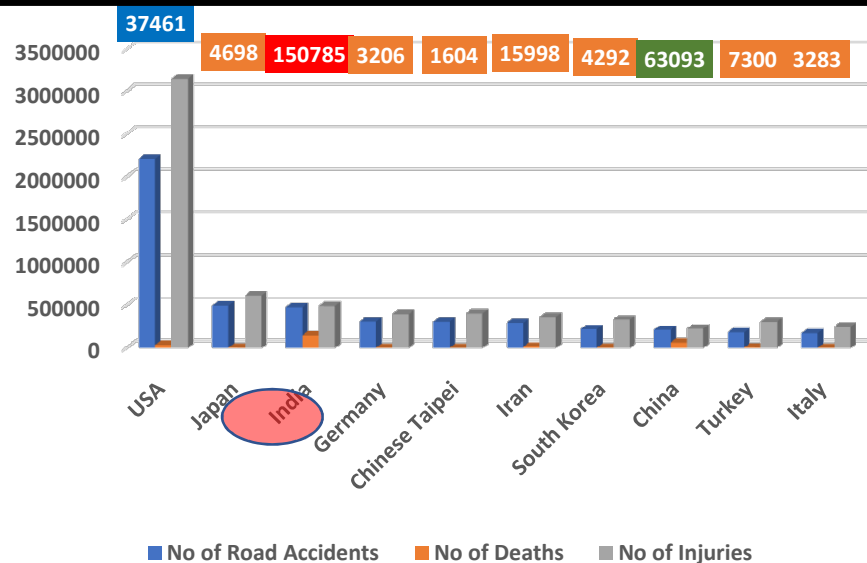
3rd Leading Cause of Global Burden of Disease

India – Highest No of Deaths & 2nd Highest Accidents

Ranked Fourth for Deaths per Lakh of Population

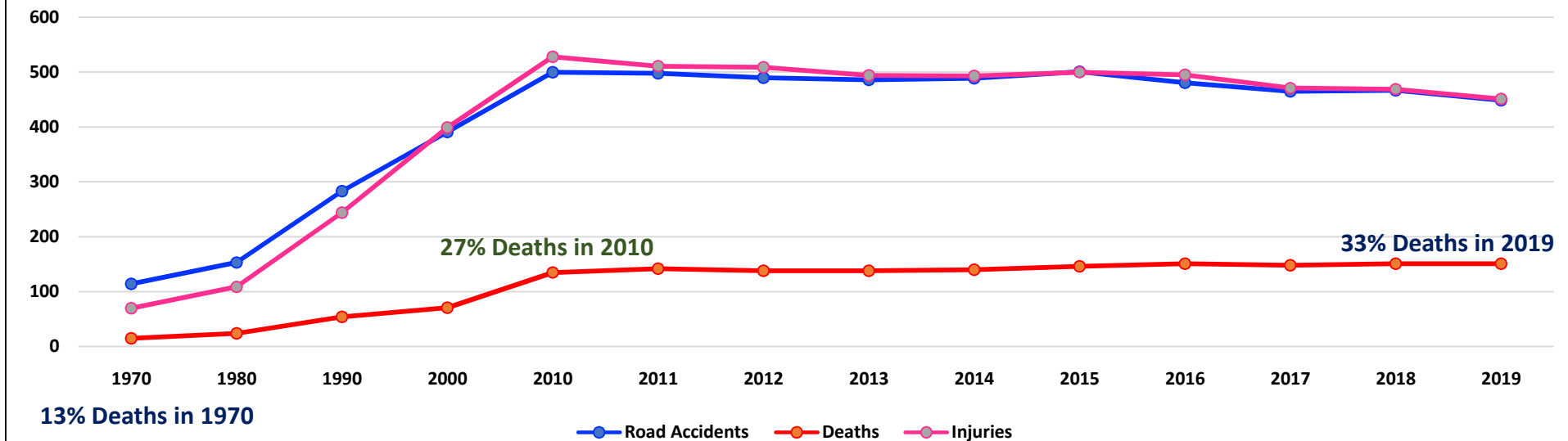
Change in rank order of DALYs for the 10 leading causes of the global burden of disease

1990		2020	
Rank	Disease or injury	Rank	Disease or injury
1	Lower respiratory infections	1	Ischaemic heart disease
2	Diarrhoeal diseases	2	Unipolar major depression
3	Perinatal conditions	3	Road traffic injuries
4	Unipolar major depression	4	Cerebrovascular disease
5	Ischaemic heart disease	5	Chronic obstructive pulmonary disease
6	Cerebrovascular disease	6	Lower respiratory infections
7	Tuberculosis	7	Tuberculosis
8	Measles	8	War
9	Road traffic injuries	9	Diarrhoeal diseases
10	Congenital abnormalities	10	HIV





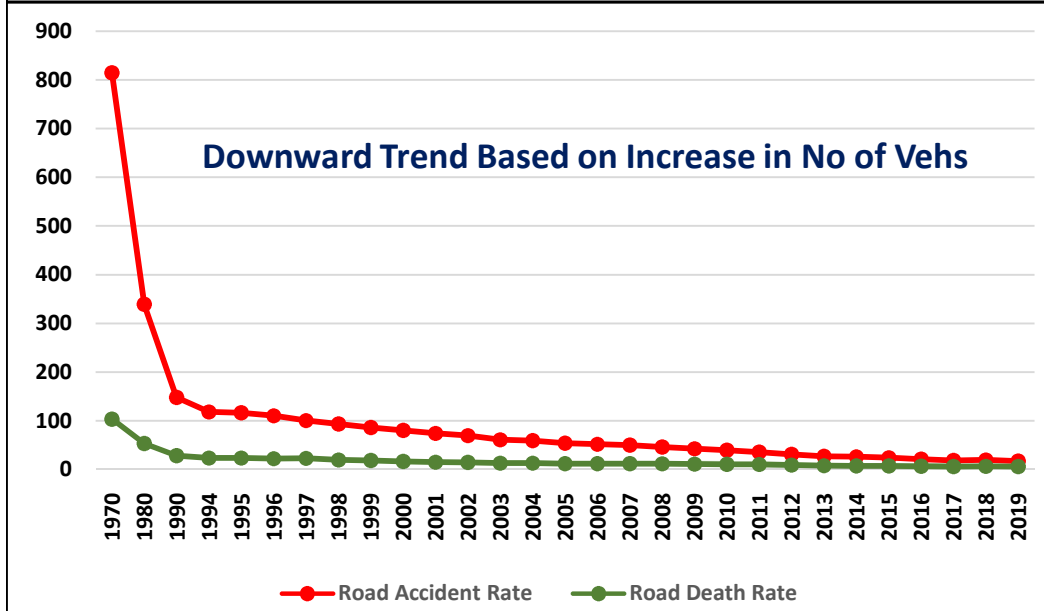
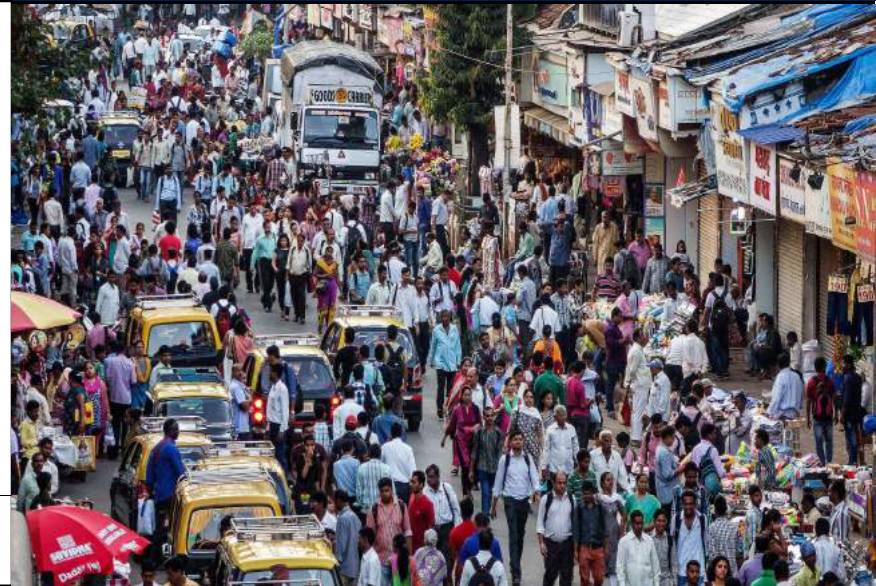
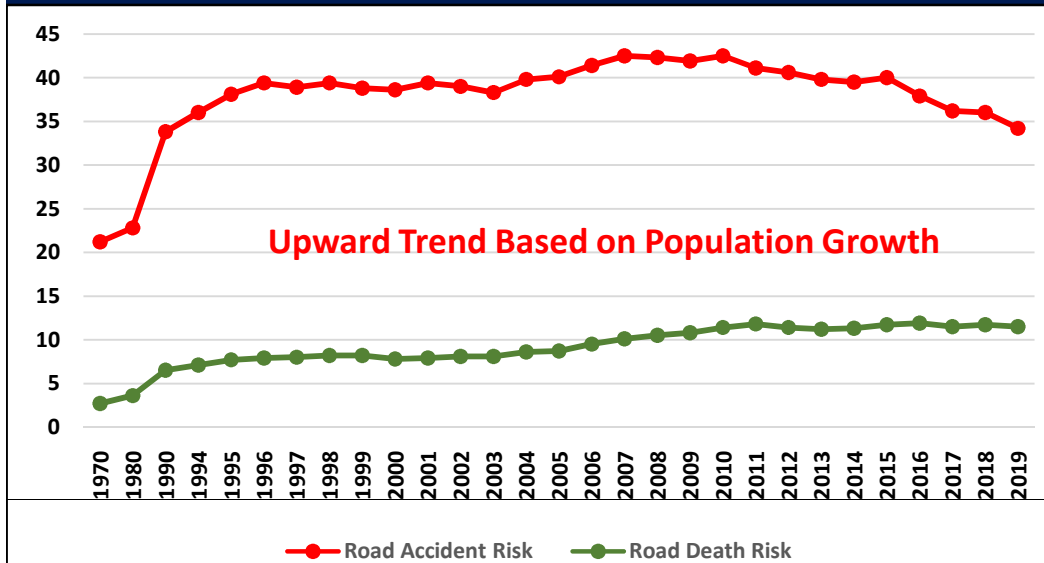
Road Accidents : Historical Trends



- Sharp Increase upto 2010
- **Stabilised over last 10 years**
- Absolute numbers worrisome
- **Increase in deaths as percentage of total number of accidents**

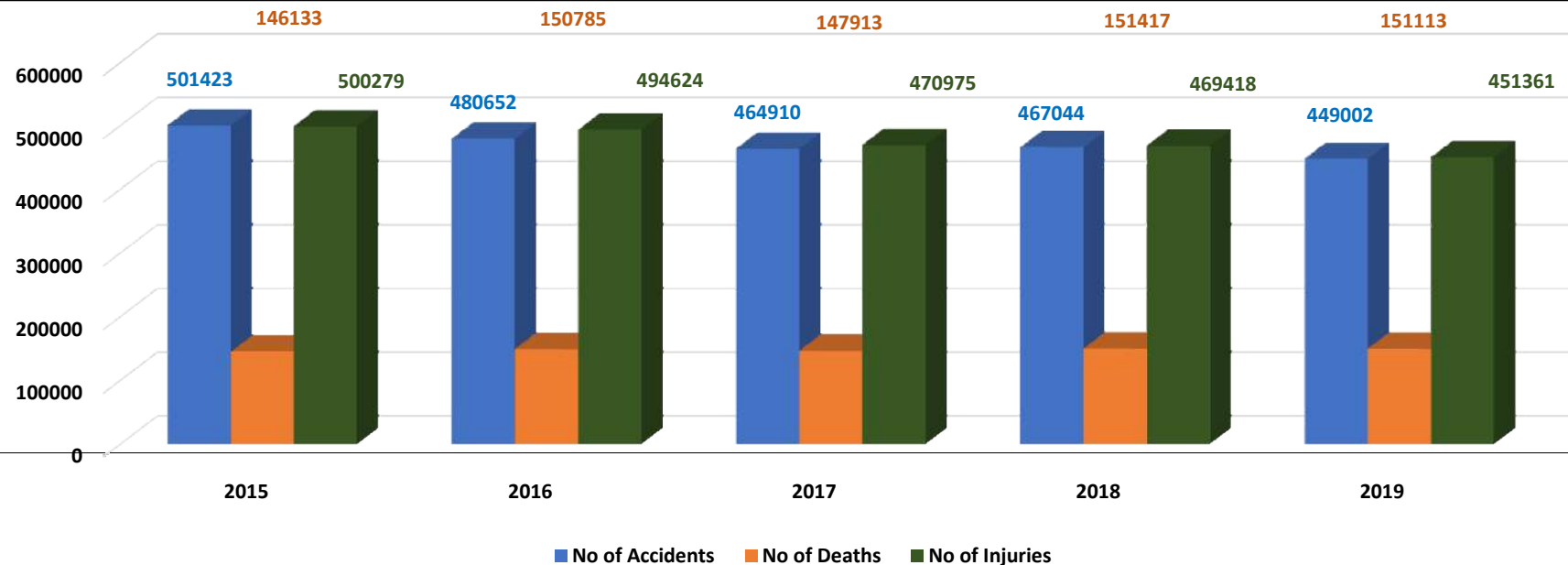


Population & Vehicle Density

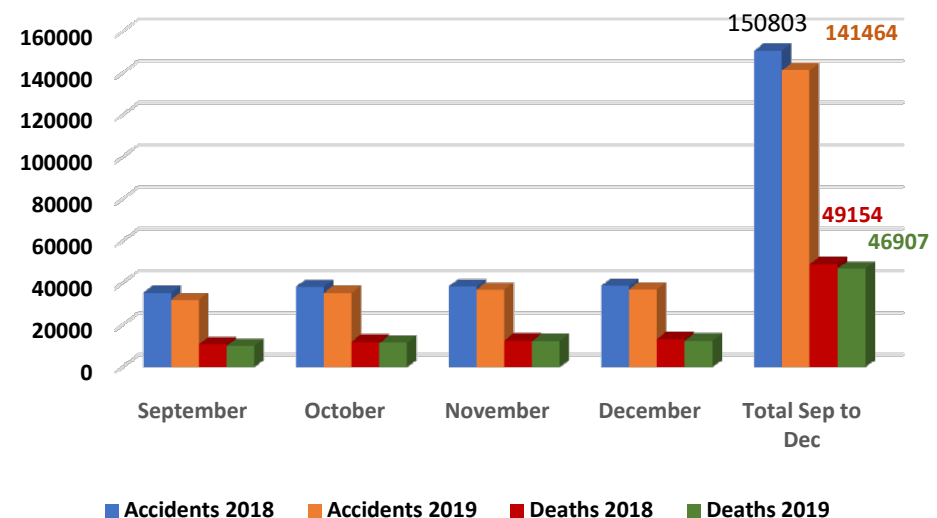




Road Accidents in 2019



- Decline in No of Accidents
- **Increase Fatalities**
- Implementation of MV Amdt Act 2019
- **Decline Sep-Dec 2019 vis-à-vis Sep-Dec 2018**





Injury Trends Due to Road Accidents

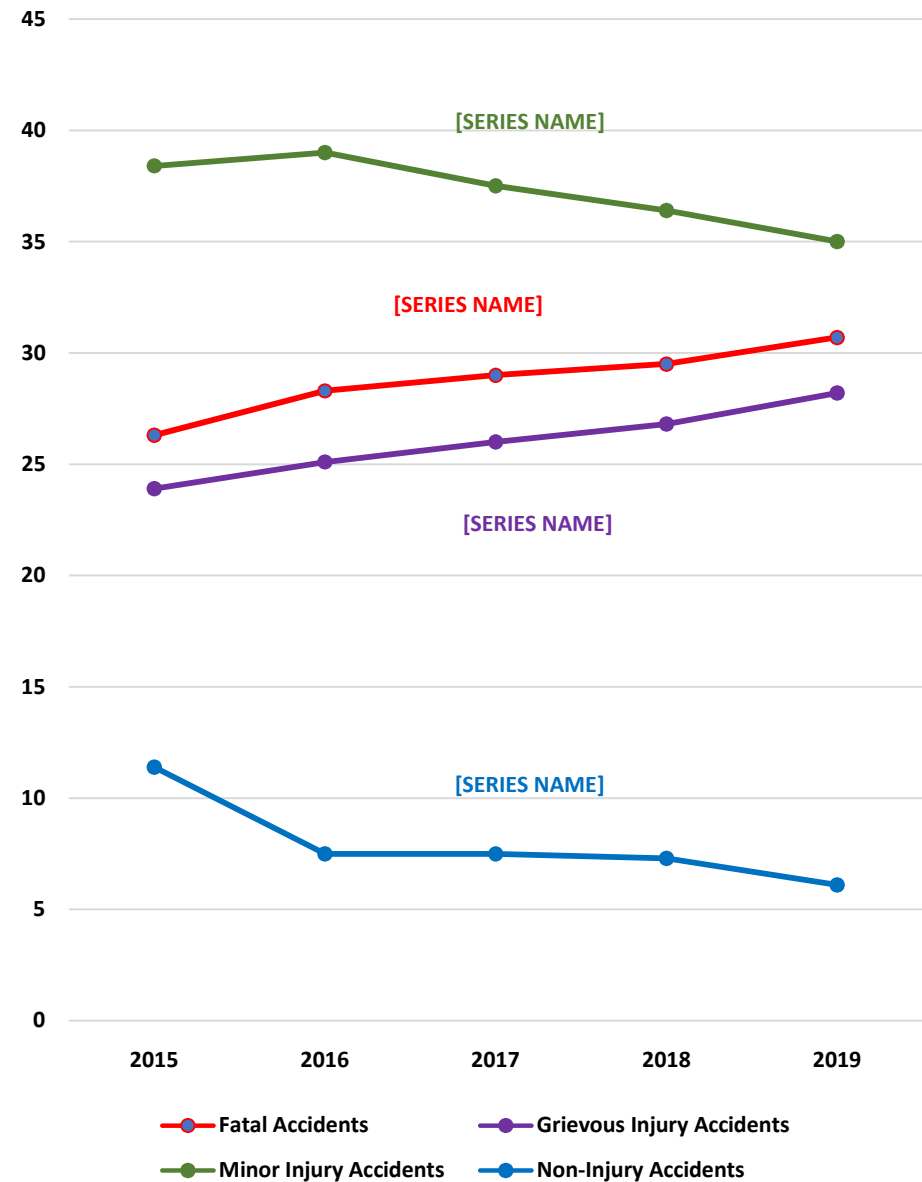


Increase

- Fatalities
- Grievous Injuries

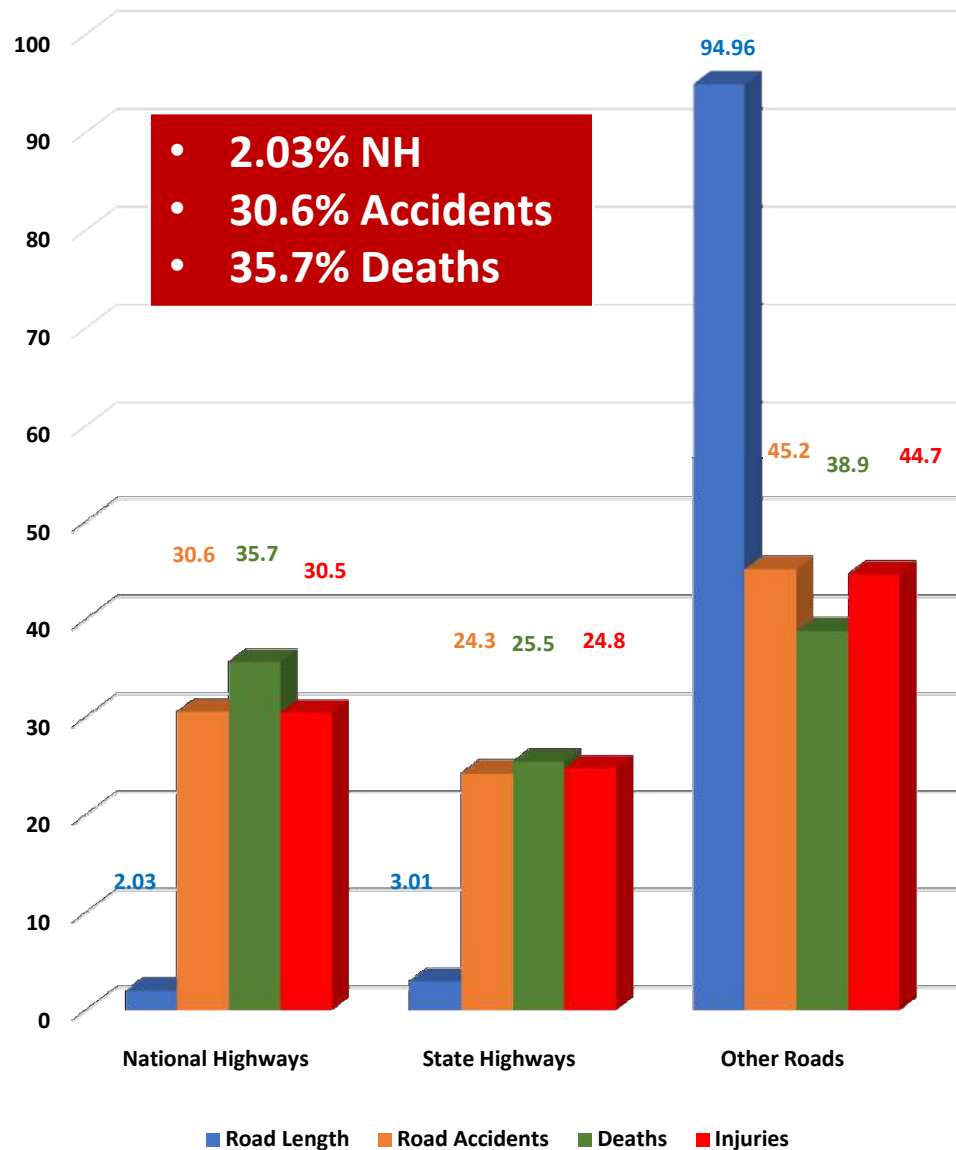
There's One Death
Every 4 Minutes
Due to a Road Accident in India

Know the Accident Statistics in India>



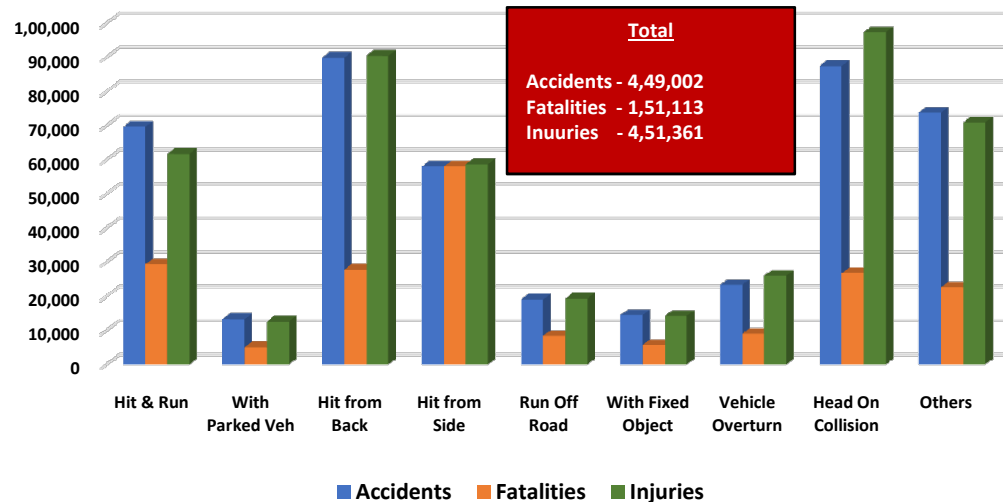


Road Accidents & Type of Roads

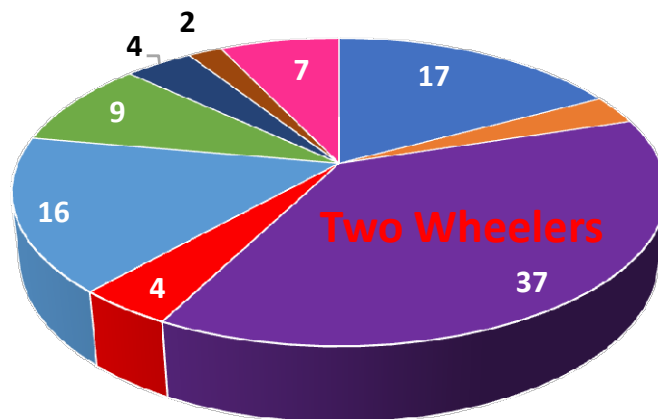




Type of Collisions & Type of Impacting Vehicles



- Hit & Run 19.5%
- Hit from Back 18%
- Head On Collision 17.7%



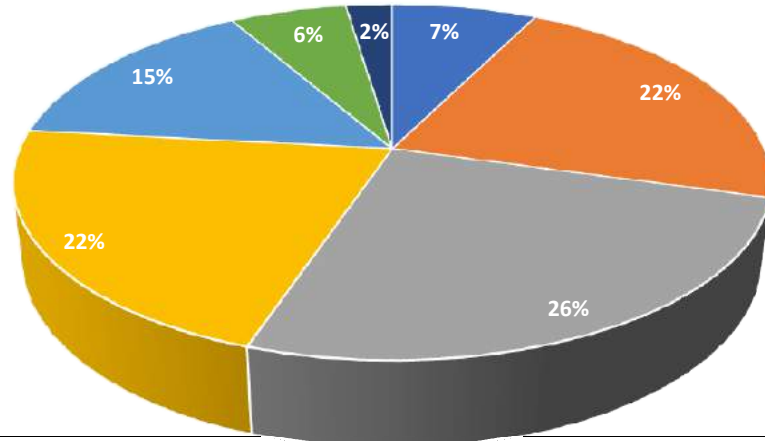
- Pedestrian
- Bicycles
- Two Wheelers
- Auto Rickshaws
- LMVs
- Trucks/Lorries
- Buses
- Other Non-Motorised Vehicles
- Others



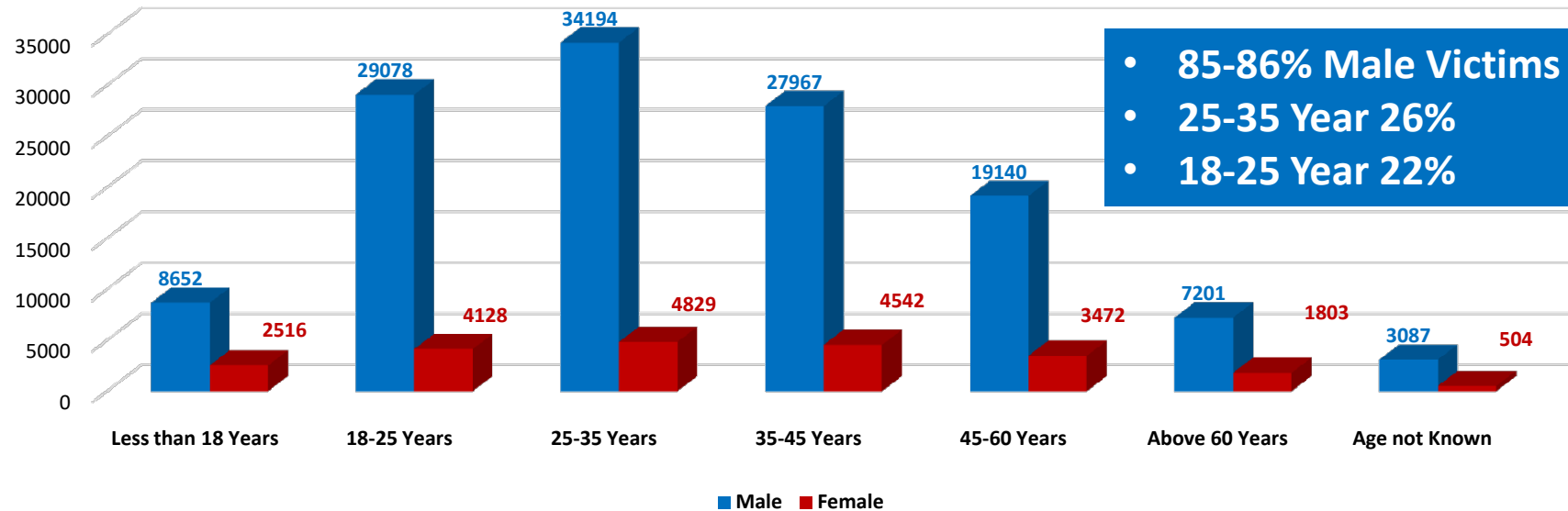
- 34% Impacted by Two Wheelers
- 22% Impacted by LMVs



Age & Gender Profile of Accident Victims



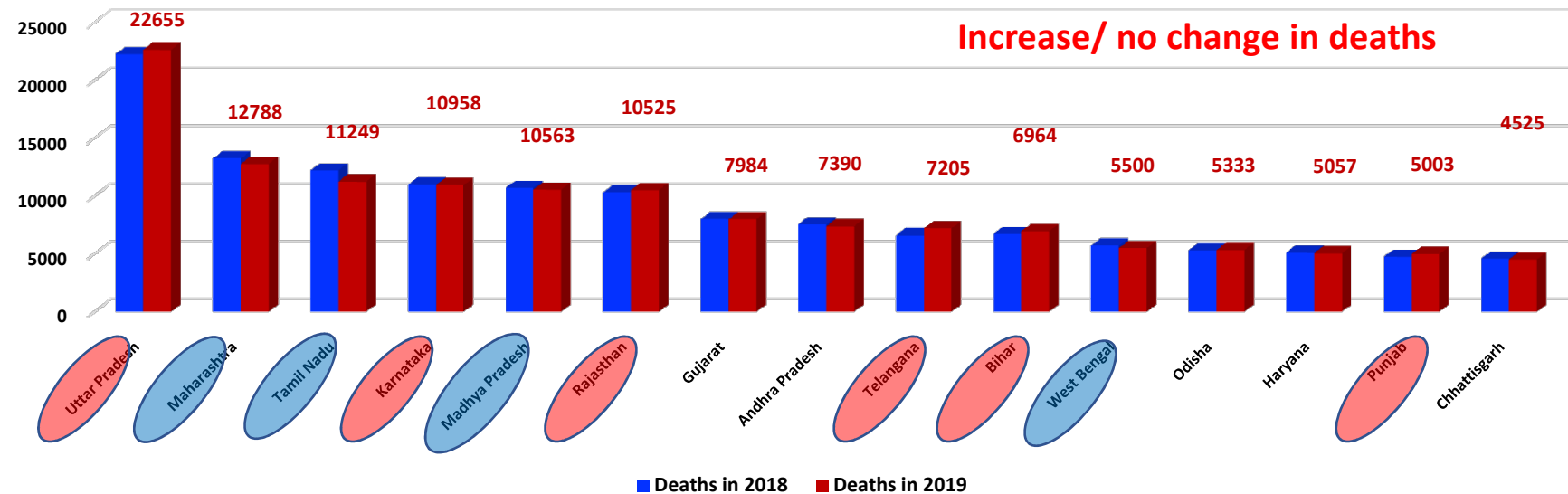
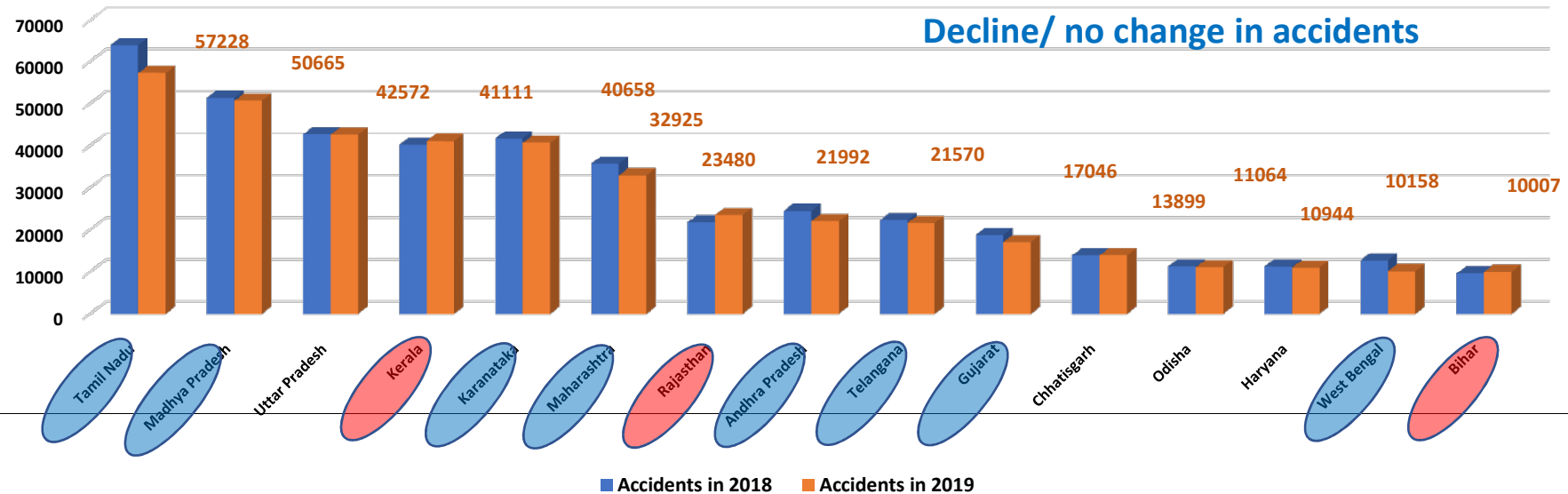
■ Less than 18 Years ■ 18-25 Years ■ 25-35 Years ■ 35-45 Years
■ 45-60 Years ■ Above 60 Years ■ Age Not Known



- 85-86% Male Victims
- 25-35 Year 26%
- 18-25 Year 22%

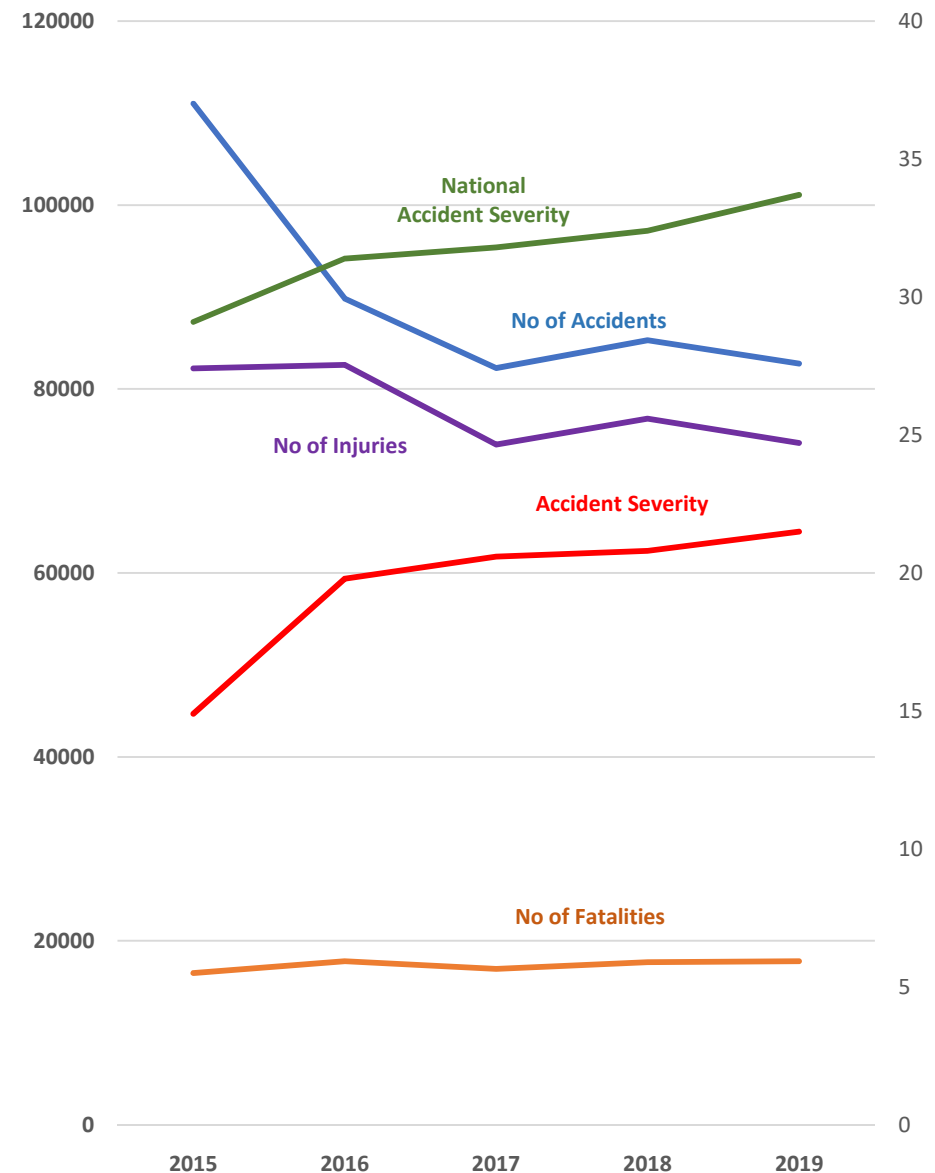
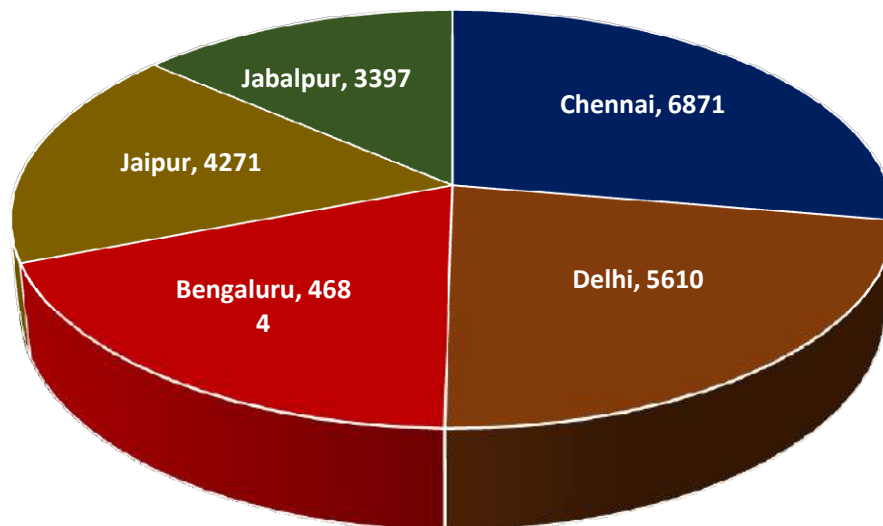


Road Accidents : Top 15 States



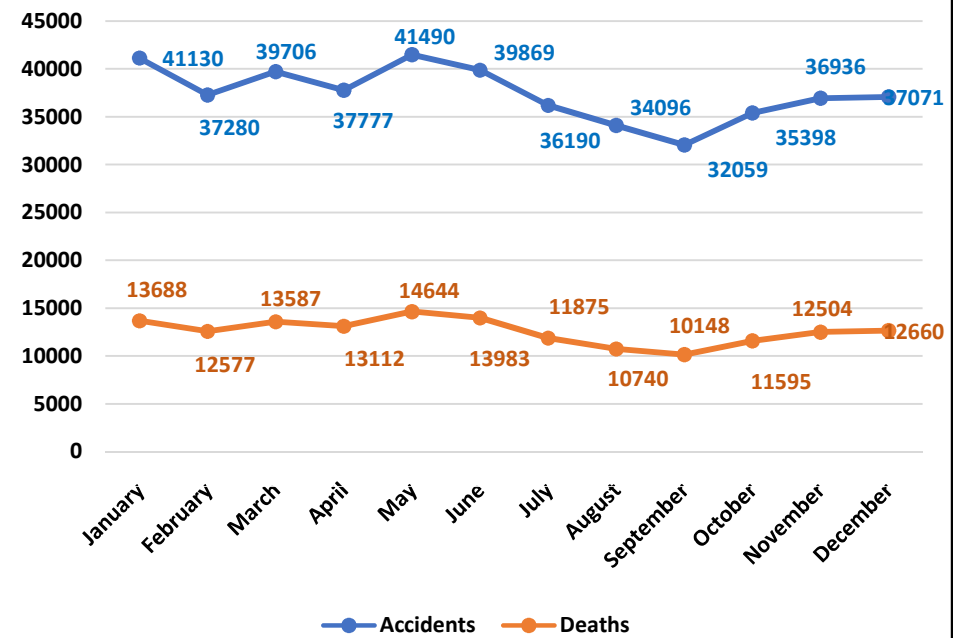
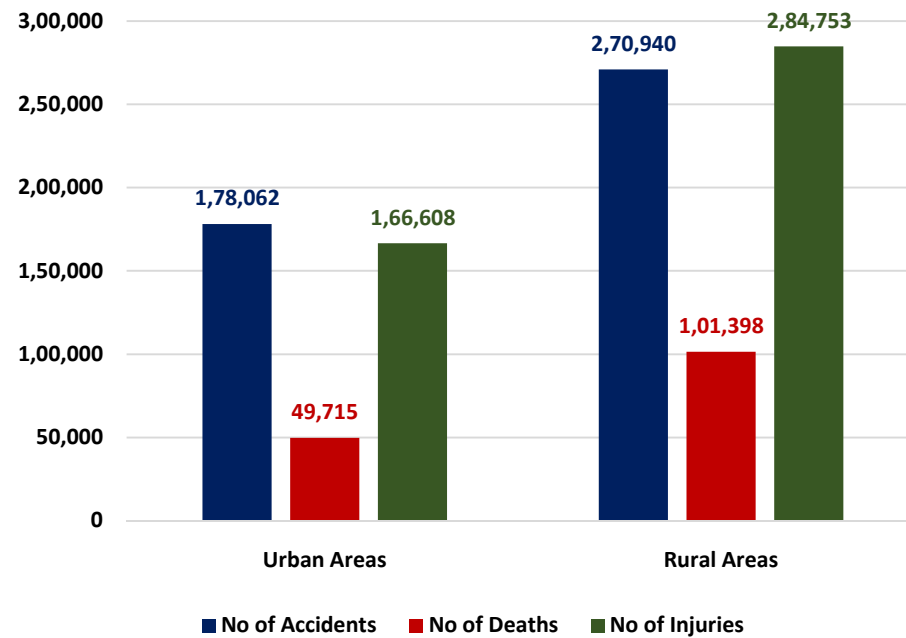


Road Accidents : Large Cities





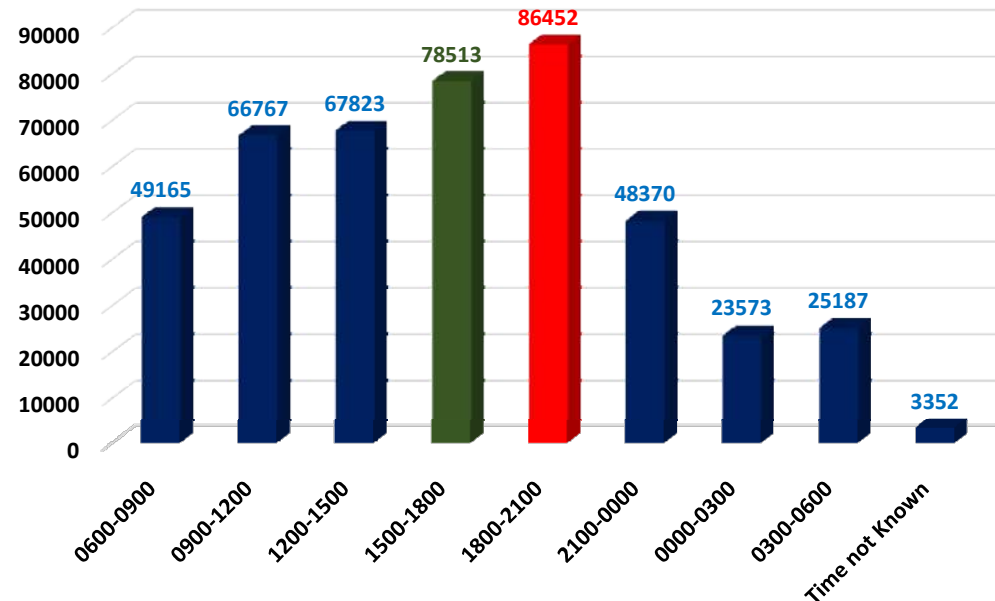
Spatial & Inter-Temporal Distr of Road Accidents



- 39% in Urban Areas – 33% Deaths
- 2019 - May, January, March
- 2015-2019 – May, June, March



Time Interval & Road Accidents



- 19.3% accidents between 1800-2100
- 17.5% between 1500-1800
- Trend maint between 2015-19
- Least between 0000-0300





ROAD ACCIDENTS CAUSES





Major Factors Causing Road Accidents



Human Factors

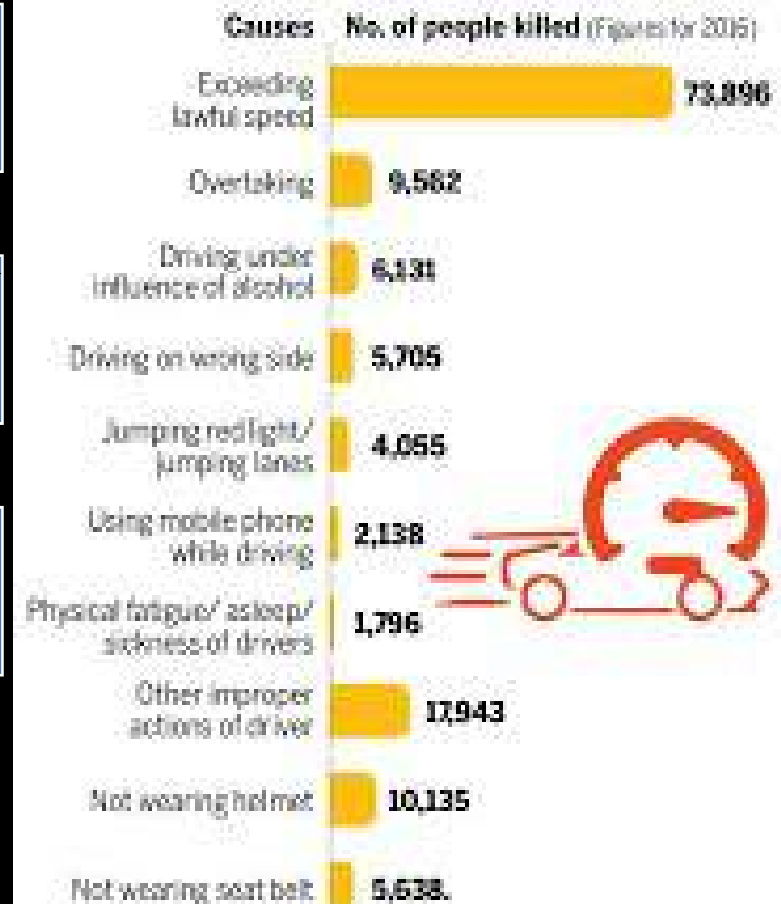


Road Environment/ Features



Vehicular Factors

OVERSPEEDING THE LEADING KILLER ON INDIAN ROADS





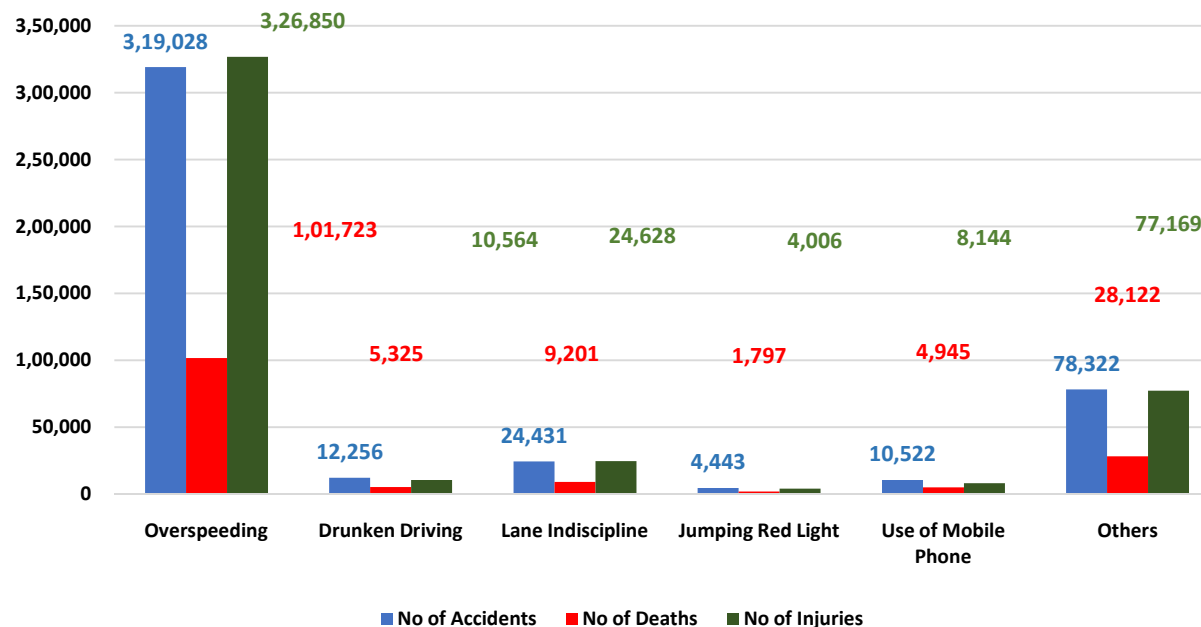
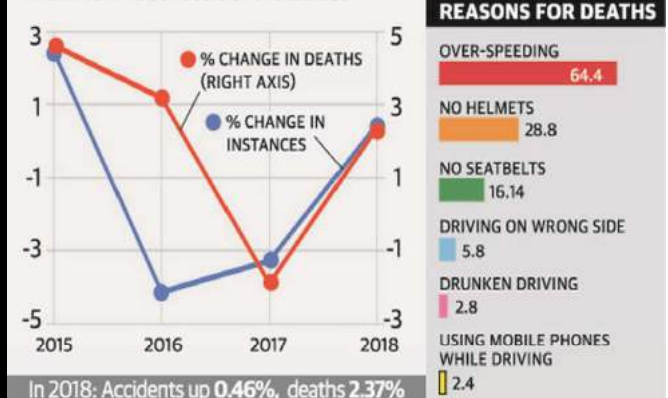
Human Factors : Traffic Tule Violations



- **71% accidents due to overspeeding**
- **Lane Indiscipline next leading cause**
- **Increase from 2018**
- **Drunk driving, jumping traffic lights & use of mobile phones – 6%**
- **17-18% accidents due to other causes – Road Environment, Vehicular Condition etc**

Speed hazards

Instances of road accidents and deaths increased in 2018 compared to 2017. Over-speeding was the reason for the maximum road-accident fatalities

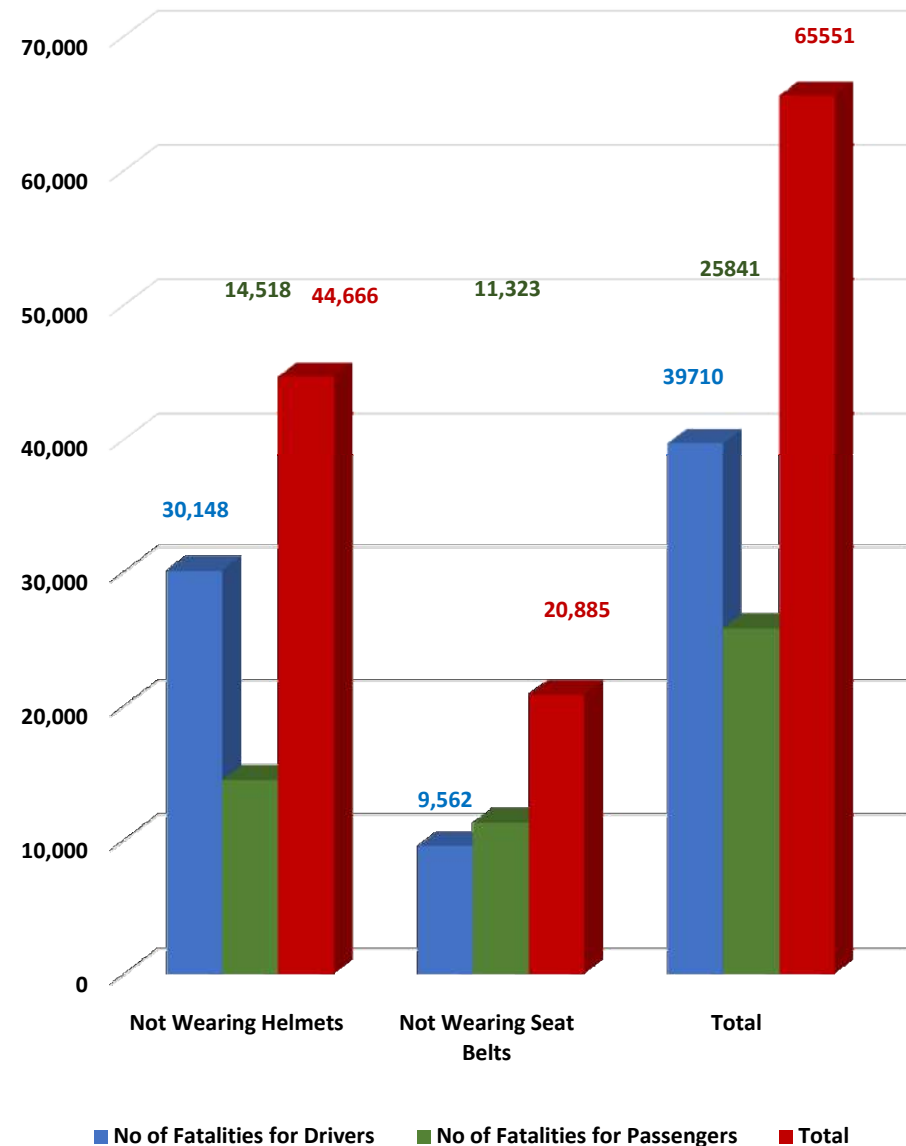




Human Factors : Non-Use of Safety Devices



- **43% of total fatalities**
- **30% for helmets and 14% for seat belts**
- **Drivers and Passengers – LMV percentage of passengers higher**
- **Airbag deployment affected if not wearing seat belt**
- **Callous attitude**

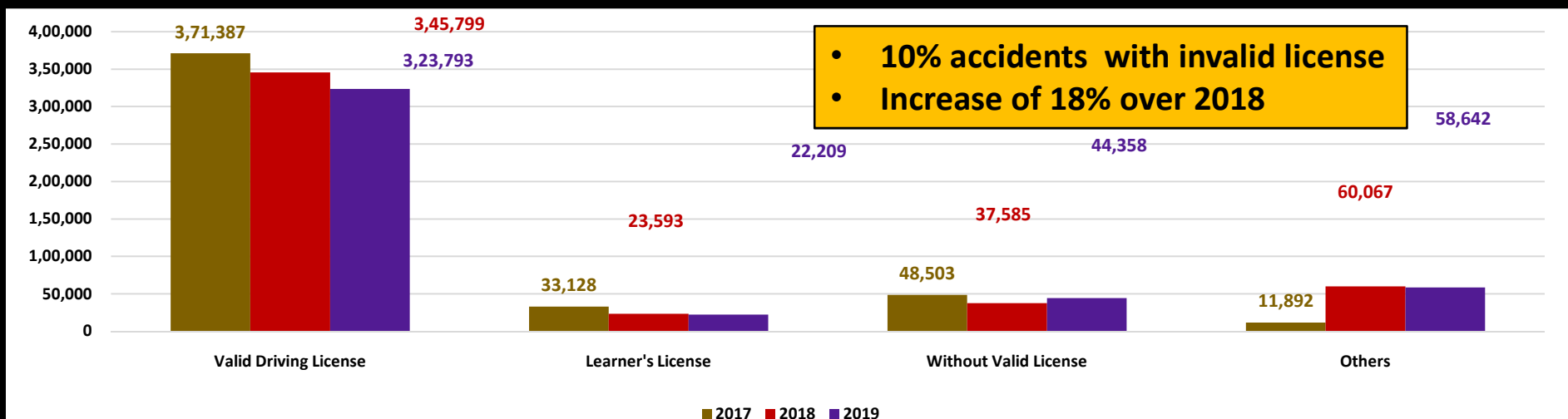
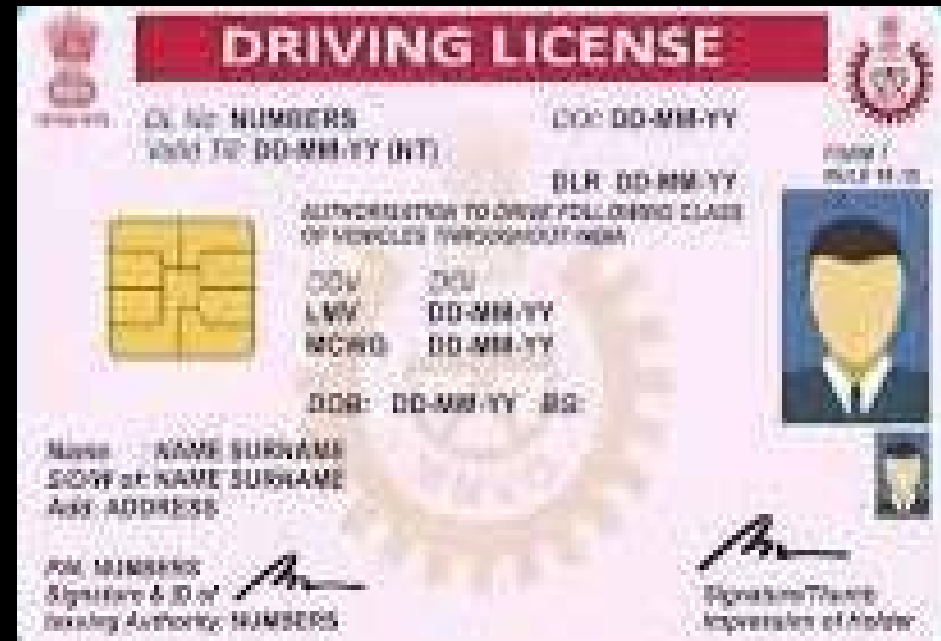




Human Factors : Other Aspects

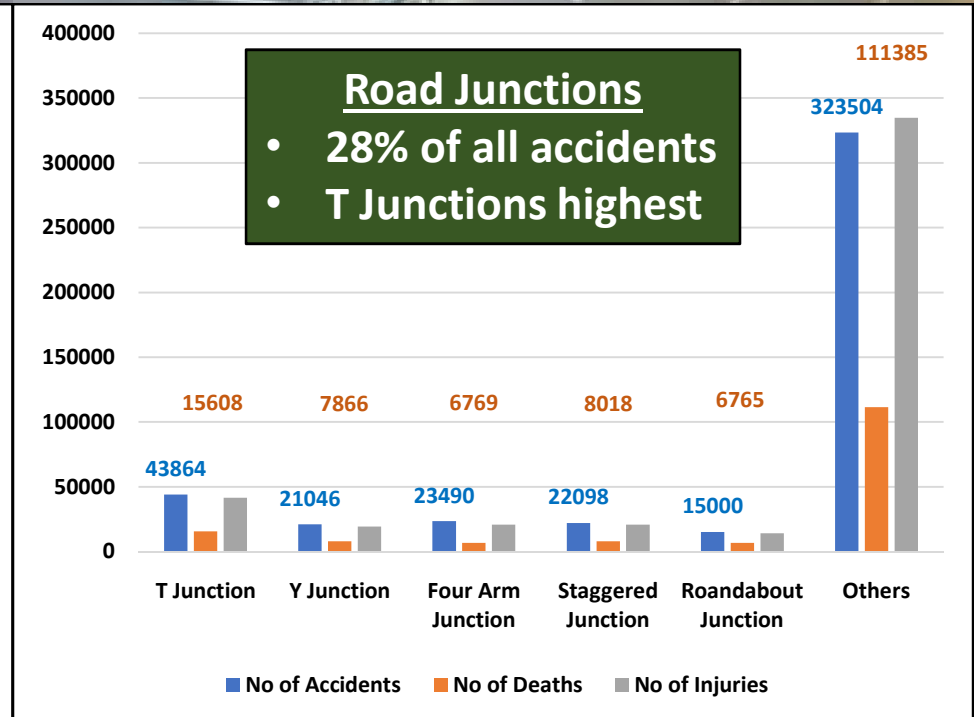
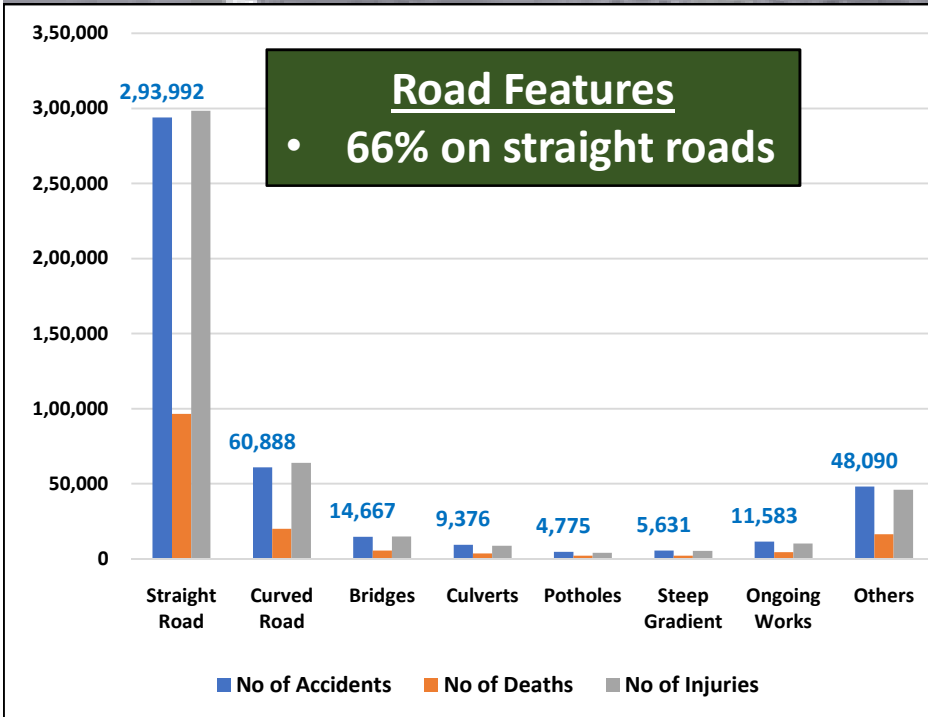
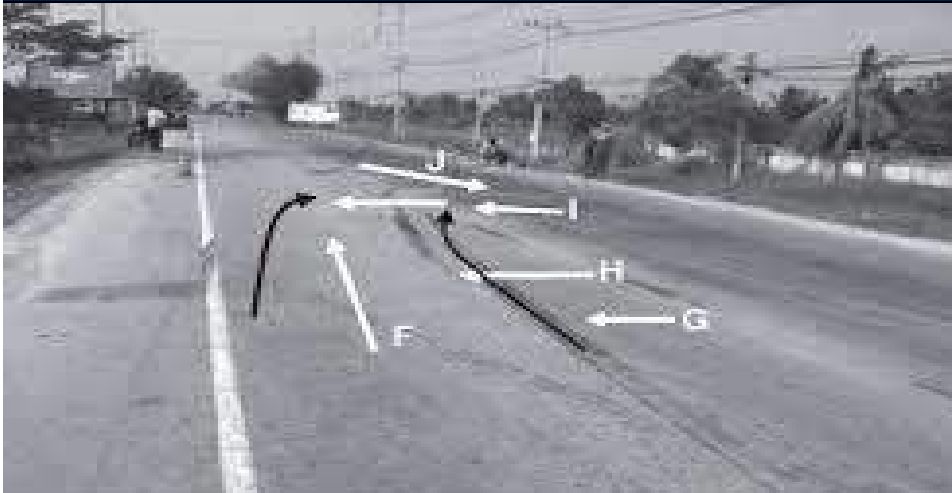


- Triple riding
- **Distracted driving**
- Negligent parking
- **Not using pedestrian crossings**
- Road rage
- **Overloading/ overcrowding of passenger vehicles**
- Improper use of headlights



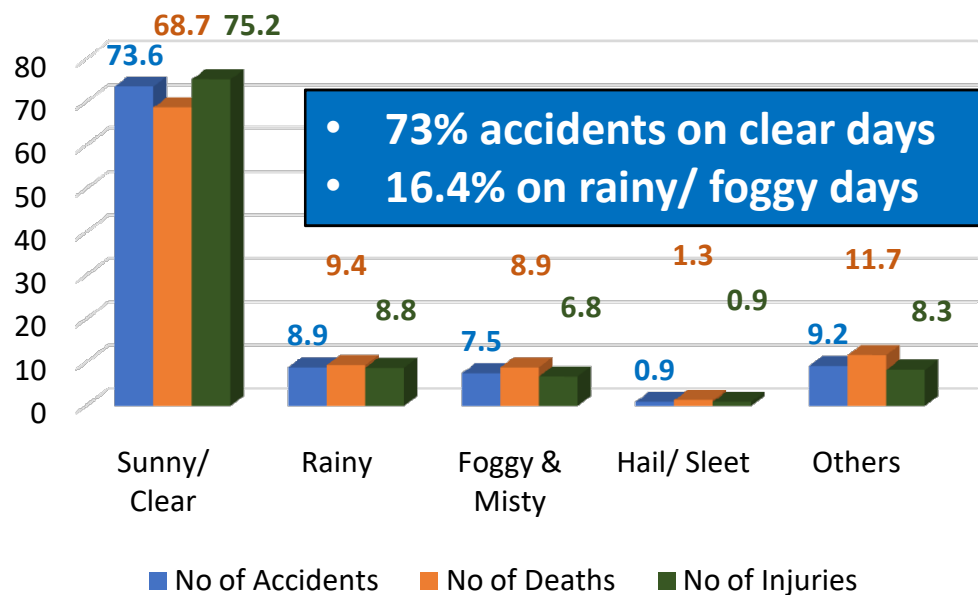
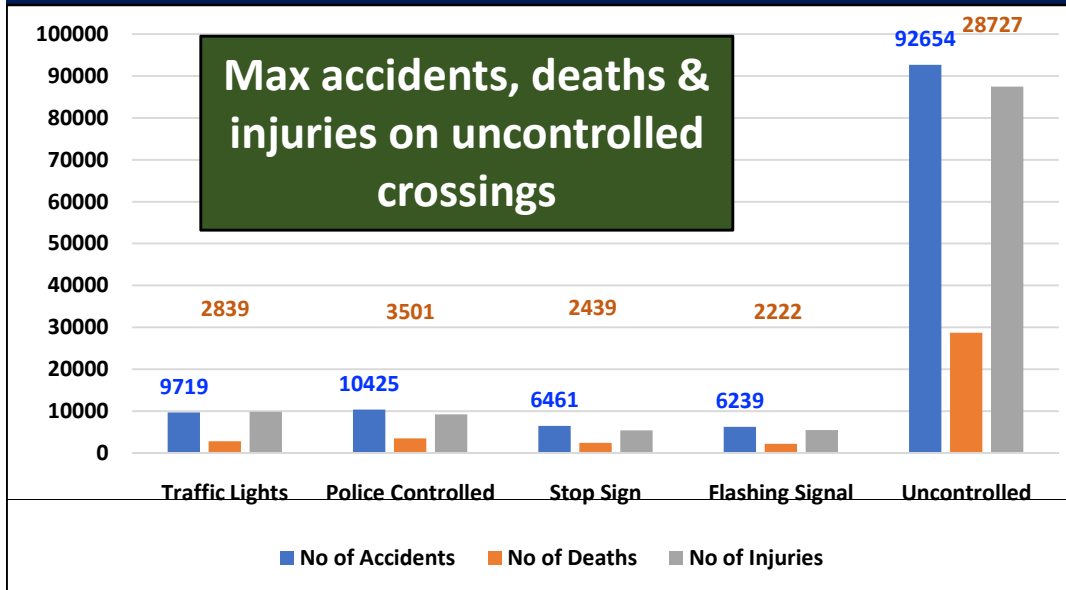


Road Features & Junctions



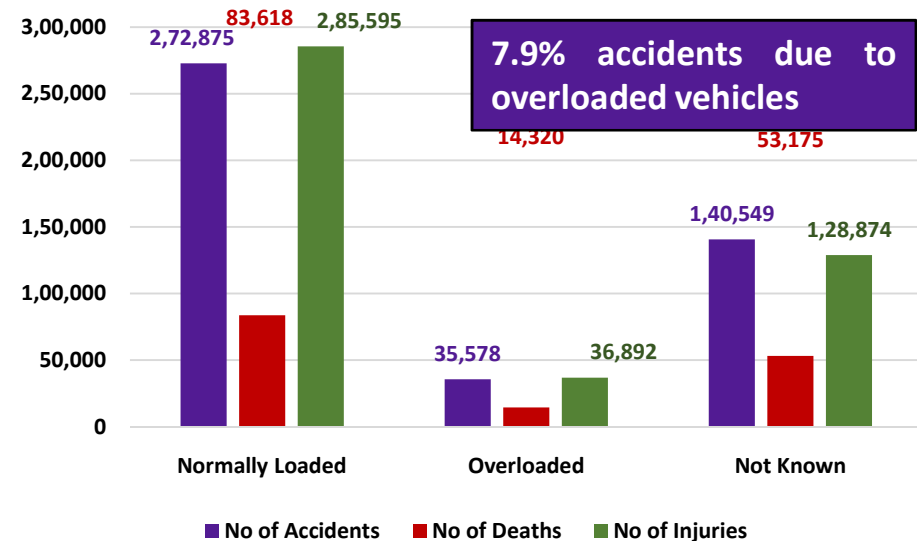
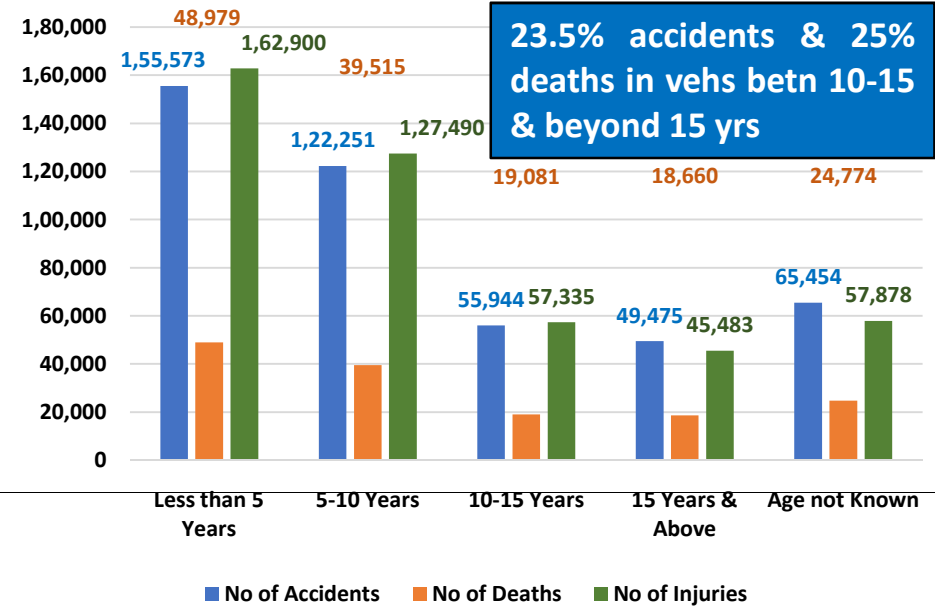


Type of Tfc Control & Weather





Vehicular Factors : Age & Overloading

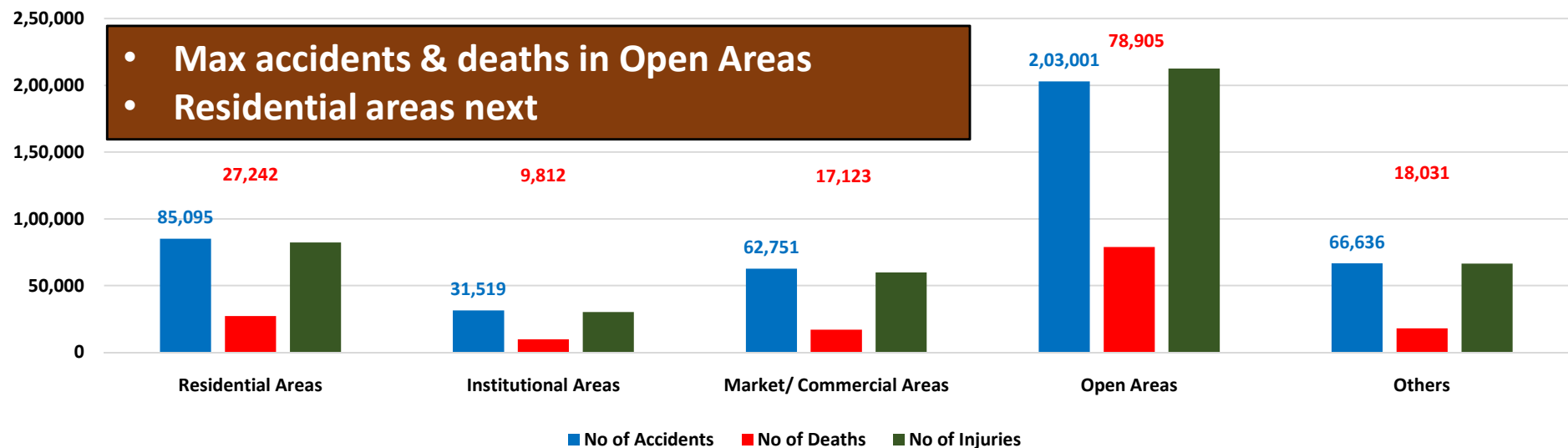




Road Environment : Other Factors

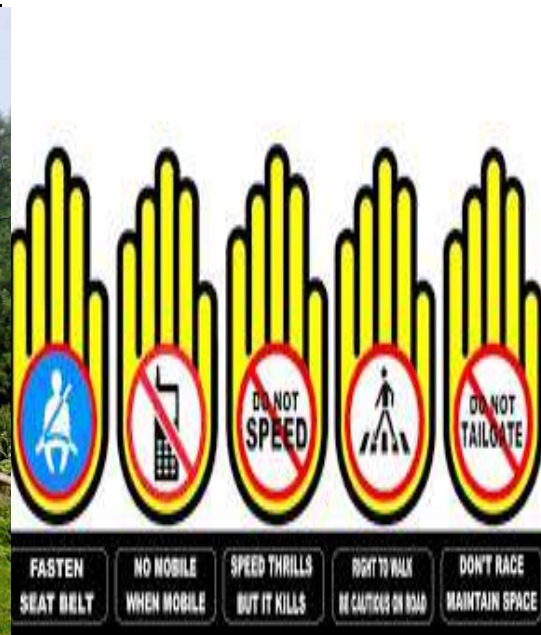


- **Neighbourhood environment**
- Potholes
- **Ongoing constr wks**
- Speed breakers
- **Poor lighting**
- Sidewalks





RECOMMENDATIONS





Recommendations : Addressing Human Factors



BRO Units as Road Safety Awareness Hubs

Road Safety Awareness Campaigns

School/ College Programmes

Road Safety Cards

Demonstration of Adherence to Norms

Harnessing Social Media



Border Roads Organisation @BROIndia · May 15
@BROIndia has created a mesmerizing video on Road Safety Awareness.

Do watch and spread the words!!!

@BROIndia urges you to follow the Traffic Rules and enjoy the ride.
!! आप सुरक्षित तो देश सुरक्षित !!
@PMOIndia @RajnathSingh_in @nitin_gadkari @Gen_VKSingh
@PemaKhanduBJP



1:06 662 views

7

14

56





Recommendations : Addressing Human Factors



Road Safety Marathon

Road Safety
Seminar by CoERSA

Road Safety Mela





Recommendations : Addressing Road Environment



Road Safety Measures



Provision of Lights



Weather Proof Roads



Safety Mirrors



Signages & Slogans



Recommendations : Addressing Road Environment



**Road
Illumination**



**Avalanche/
Slide Protection**



Rest Shelters



**Revise Constr
Norms**



Accident Audit



Jai Hind!

