VISION ZERO

An initiative of Transport Department, Madhya Pradesh to create safe streets and reduce road accident deaths

www.transport.mp.gov.in
# Annual Global Road Crash Statistics

## The Global Context

<table>
<thead>
<tr>
<th>Category</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths Per Day</td>
<td>Nearly 1.3 Million People die in Road Crashes Each year with the average 3287 deaths per day</td>
</tr>
<tr>
<td>Half of All Road Traffic Deaths</td>
<td>More than HALF of all road traffic deaths occur among people ages 15-44</td>
</tr>
<tr>
<td>Injuries/Disabled</td>
<td>An Additional 20-50 Million are injured or disabled</td>
</tr>
<tr>
<td>Road Crash Cost</td>
<td>Road Crash Cost around $518 BILLION Per year and are predicted to be become the 5th Leading</td>
</tr>
<tr>
<td>Average Deaths Per Day</td>
<td>For ages 15-29, road crashes are the LEADING cause of death and for ages 2-14, the SECOND LEADING cause of death</td>
</tr>
<tr>
<td>Deaths by Age</td>
<td>Overall cause of death by 2030</td>
</tr>
<tr>
<td>People Under Age of 25</td>
<td>1000 peoples under Age of 25</td>
</tr>
<tr>
<td>Deaths by Age of 25</td>
<td>25 Deaths on Roads each day</td>
</tr>
</tbody>
</table>
Persons killed in accidents in- 2019 state wise

**TRAFFIC ACCIDENTS**

(2019)

**TOTAL ACCIDENTS**

4,49,002

Persons Killed

1,51,113

Persons Injured

4,51,361

**IT MEANS**

1,230

Road accidents

414

Road accident-related deaths a day

The Indian Context
<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darjeeling</td>
<td>1,20,414</td>
</tr>
<tr>
<td>Roorkee</td>
<td>1,18,188</td>
</tr>
<tr>
<td>Chittaurgarh</td>
<td>1,16,409</td>
</tr>
<tr>
<td>Anantnag</td>
<td>1,08,505</td>
</tr>
<tr>
<td>Bhadrak</td>
<td>1,07,369</td>
</tr>
<tr>
<td>Wardha</td>
<td>1,05,543</td>
</tr>
<tr>
<td>Greater Noida</td>
<td>1,07,676</td>
</tr>
<tr>
<td>Port Blair</td>
<td>1,00,608</td>
</tr>
<tr>
<td>Gangtok</td>
<td>1,00,286</td>
</tr>
</tbody>
</table>

There is one **death** every **4 minutes** due to a road accident in **India**.

Average road deaths per year in India in last one decade **1,36,118**.

Source: Ministry of Road Transport & Highway

Source: Population as per Census 2011, Ministry of Road Transport and Highways
These numbers are not merely statistics. Behind each number is a person, a family, a friend, and a story of how life can change in an instant. All of them were future mothers, fathers, physicians, workers, teachers, and artists.
<table>
<thead>
<tr>
<th>S. no.</th>
<th>States</th>
<th>2018</th>
<th>2019</th>
<th>Change in 19 over 18</th>
<th>% Change in 19 over 18</th>
<th>Rank in 2018</th>
<th>Rank in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TAMIL NADU</td>
<td>63,920</td>
<td>57,228</td>
<td>-6,692</td>
<td>-10.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>MADHYA PRADESH</td>
<td>51,397</td>
<td>50669</td>
<td>-728</td>
<td>-1.4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>UTTAR PRADESH</td>
<td>42,568</td>
<td>42,572</td>
<td>4</td>
<td>0.0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>KERLA</td>
<td>40,181</td>
<td>41,111</td>
<td>930</td>
<td>2.3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>KARNATAKA</td>
<td>41,707</td>
<td>40,658</td>
<td>-1049</td>
<td>-2.5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- Madhya Pradesh stands second in terms of accidents in the country.
- The percentage share of accidents in the state to total accidents in the country has been hovering around 10 to 11 percent.
Road accidents implication

- Road traffic injuries cost low income and middle-income countries between 1% and 2% of their gross national product – more than the total development aid received by these countries.
- Economic losses not only to individuals, their families
- Cost of treatment
- Loss of productivity for injured and caretakers
• Road crash and serious injury cost estimate at 7.5 per cent of India's GDP or Rs 12.9 lakh crore for 2016

• MoRTH estimates the socio-economic costs of road crashes at Rs 5.96 lakh crores i.e. equivalent to 3.14 per cent of GDP.
VISION ZERO
Setting a higher standard for road safety

“NO LOSS OF LIFE ON ROADS IS ACCEPTABLE”
What is Vision Zero

![Graph showing yearly fatalities (NUTS2 region) for Sweden, Östra Sverige (East Sweden), Södra Sverige (South Sweden), and Norra Sverige (North Sweden). The graph displays a downward trend in fatalities from 1990 to 2015.]

**Country** | **Road Fatalities in 2013 as % of 1980**
--- | ---
Australia | 36.2%  
Austria | 22.7%  
Denmark | 27.7%  
Germany | 22.2%  
Netherlands | 23.8%  
United Kingdom | 28.6%  
France | 24%  
Spain | 25.7%  
Japan | 45.2%
Vision Zero in INDIA

<table>
<thead>
<tr>
<th>Districts</th>
<th>Fatalities 2015</th>
<th>Fatalities 2016</th>
<th>Fatalities 2017</th>
<th>% Change from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hisar</td>
<td>231</td>
<td>253</td>
<td>199</td>
<td>10%</td>
</tr>
<tr>
<td>Ambala</td>
<td>247</td>
<td>301</td>
<td>240</td>
<td>22%</td>
</tr>
<tr>
<td>Sonipat</td>
<td>352</td>
<td>425</td>
<td>397</td>
<td>21%</td>
</tr>
<tr>
<td>Jhajjar</td>
<td>230</td>
<td>255</td>
<td>242</td>
<td>11%</td>
</tr>
<tr>
<td>Karnal</td>
<td>291</td>
<td>390</td>
<td>376</td>
<td>34%</td>
</tr>
<tr>
<td>Panipat</td>
<td>240</td>
<td>292</td>
<td>306</td>
<td>22%</td>
</tr>
<tr>
<td>Rohtak</td>
<td>198</td>
<td>241</td>
<td>252</td>
<td>22%</td>
</tr>
<tr>
<td>Rewari</td>
<td>240</td>
<td>274</td>
<td>289</td>
<td>14%</td>
</tr>
<tr>
<td>Kurukshetra</td>
<td>272</td>
<td>234</td>
<td>256</td>
<td>-14%</td>
</tr>
<tr>
<td>Gurugram</td>
<td>365</td>
<td>415</td>
<td>481</td>
<td>14%</td>
</tr>
</tbody>
</table>

Total HVZ Districts: 2666 3080 3038 16% -1%

Total non-HVZ Districts: 1763 1944 2117 10% 9%

Total State: 4429 5024 5155 13% 3%

4160 km Road Inspection, 760 Crash Investigations, 78 Blackspots Audited, 295 Zero Tolerance drives, 87 District Road Safety Meetings 1040 Reports submitted, 80% Work implemented
FOUR PRINCIPLES OF VISION ZERO

SAFETY FIRST
Protecting human life is more important than resolving other traffics-related issues, such as congestion, speed or capacity.

FORGIVING SYSTEMS
To some extent human error is unavoidable. Roads and Vehicles, need to have fail-safe features so that human error is unlikely to cause serious injury or death.

SHARED RESPONSIBILITY
Transport providers and authorities are as responsible for safety as road users.

COORDINATED ACTION
An effective road safety strategy needs coordinated action between all stakeholders, with inter-linked targets, periodic communication and corrective mechanisms.
Pillars of Vision Zero

- Safe Speed
- Safe Vehicles
- Safe Roads
- Post-collision Response
- Safe Behaviours
Pillars of Vision Zero

PILLAR 1: SAFE SPEED

Approximate survival rate if hit by a vehicle at the following speeds.

- 30 km/h: 9 out of 10
- 40 km/h: 6 out of 10
- 50 km/h: 2 out of 10
- 60 km/h: 0 out of 10

Over-speeding accounts for the maximum share of road accident and road accident deaths (ranging between 63% to 74% for accidents and between 62% to 70% for road accident deaths) on all the categories of National Highways.
Pillars of Vision Zero

ACTION ON SAFE SPEED

- Reassessing safe speeds for various roads and streets
- Creating special Slow Speed Zones

- Enforcing compliance with Speed limits
- Use of Speed Cameras

- Awareness campaign among youth and professional drivers on Safe speed
Pillars of Vision Zero

VISION ZERO TARGETS: SAFE SPEED

1. Conducting Speed audits to define ‘Special Slow Speed Zones’ in collaboration with the District Road safety Committee
   - Transport Department
   - November 2021

2. Installing Speed Cameras on Important points on Highways and in big cities
   - Transport, Police and Municipal Corporations
   - December 2021

3. Awareness Drive for youth to control overspeeding
   - Transport, Police and Education Departments
   - Two awareness drives in every district in every month
PILLAR 2: SAFE ROAD AND STREETS

A key to making people feel safe on our streets and roads is reducing danger at locations where the likelihood of injury is higher than in other places.

According to MoRTH report, National and State highways share 55% of total accidents and 61% of total accident deaths.
Road junctions are traffic merging points and hence are prone to accidents. The data of 50 million plus cities reveal that about 44% of the accidents in 2019 took place at various types of junctions defined in the table above, while “others” category accounted for the remaining 56% of the accidents.

Within the junctions category, T-junction accounts for the largest share of accidents (13.9%), persons killed (11.7%) and injuries (13.9%) The leading five million plus cities in terms of accidents on T-junctions are Jabalpur(962), Indore(916), Bengaluru(786), Delhi(717) and Kollam(621).
Pillars of Vision Zero

**Road Safety audits**
( Remove hoardings, Boards, encroachments)

**Continuous updating of Integrated Road Accident Database (IRAD)**

**Systematic management of Black Spot and rectification**
VISION ZERO TARGETS: SAFE ROADS

- Conducting Road Safety Audits to identify and rectify dangerous junctions, curves and obstacles
  - Transport, Police, NHAI/PwD
  - One major Audit every month every district

- Continuous updation of IRAD database on accidents
  - Transport /Police
  - Continuous

- Black Spots Management- Establishing protocol and rectification of black spots
  - Transport/Police/NHAI/Road agency
  - All black spots to be visited and analyzed
“Safe vehicles” play a critical role in averting crashes and reducing the likelihood of serious injury.
Rigorous fitness testing of Vehicles.

Establishing Automatic Fitness Testing Centers on PPP Mode

Strict enforcement of seatbelts and SLDs

Audit of 100% School buses
Vision Zero Targets: Safe Vehicles

- Establishing Automatic Vehicle Fitness Centres in all Districts
  - Transport
  - March 2022

- Fitness audit of all School Buses
  - Transport
  - December 2021

- Strict Enforcement of Seatbelts and Speed Limiting Devices
  - Transport/Police
  - Continuous
Pillars of Vision Zero

PILLAR 4: SAFE ROAD BEHAVIOURS

Driving under the influence of alcohol or drugs, enhances probability of fatal crash to about 5 times.

Correct helmet use can lead to a 42% reduction in the risk of fatal injuries and a 69% reduction in the risk of head injuries.

Wearing a seat-belt reduces the risk of death by 45 - 50%.

Drivers using mobile phones are approximately 4 times more likely to be involved in a crash.
Widespread campaign to improve responsible road behaviour
- More driver training Centers to ensure better drivers on road

Enforcement against drunken driving, driving without helmets and seat belts
- Road safety films/clippings to educate people

Amendment in the Motor Vehicle Rules for enhanced punishment on overspending etc.

Encouraging use of public transport
<table>
<thead>
<tr>
<th>VISION ZERO TARGETS: SAFE ROAD BEHAVIOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widespread awareness campaign on responsible road behaviour</td>
</tr>
<tr>
<td>Transport/Education</td>
</tr>
<tr>
<td>Transport/Police</td>
</tr>
<tr>
<td>Establishing Driving Training Schools to prepare better trained drivers</td>
</tr>
<tr>
<td>Transport Department</td>
</tr>
</tbody>
</table>
Pillars of Vision Zero

PILLAR 5: POST-CRASH RESPONSE

Increase responsiveness to post-crash emergencies and improve the ability of health and other systems to provide appropriate emergency treatment and longer term rehabilitation for crash victims.
ACTION ON POST-CRASH RESPONSE

- Develop prehospital care system including the extraction of a victim from a vehicle after a crash and single telephone number for emergencies, through implementation of existing good practices.

- Mapping the PHCs and ambulances to various road stretches for faster and certain response, establishing and publicising protocol for Golden Hour and good samaritans.

- Establishing universal accident Helpline Number.
VISION ZERO TARGETS: POST CRASH RESPONSE

- Mapping the PHCs and ambulances to various stretches of the Roads
  - Transport/Health Departments
  - December 2021

- Establishing and Publicizing Protocols on Golden Hour and Good Samaritans
  - Transport Department
  - October 2021

- Establishing Universal Accident Helpline Number
  - Transport/Pollce and Health
  - November 2021
It is neither inevitable nor acceptable that anyone should be killed or seriously injured when travelling on the roads of MP. When we leave our homes each day, we should feel safe and confident about the journey ahead.

All of us, whether we are travelling on the roads of MP or helping people make their journeys, share a responsibility and a moral imperative to reduce danger and the fear it creates. Our first priority is the safety of everyone using our Transport Network.
SAVING LIVES WITH SAFE STREETS