

# 1

## AN OVERVIEW

Road accident injuries claim more than 1.2 million lives each year and have a huge impact on health and development.

- In addition to deaths on the roads, up to **50 million people incur non-fatal injuries** each year as a result of road traffic crashes, while there are additional indirect health consequences that are associated with this growing epidemic. As vehicle ownership grows, many countries face the twin problems of traffic congestion and rising vehicle tailpipe emissions, resulting in higher rate of respiratory illness. Rising car ownership has also resulting in reduced physical activities such as walking and cycling, with associated health consequences. (Source: GLOBAL STATUS REPORT ON ROAD SAFETY 2015 :WHO)

### INTERNATIONAL TRENDS

According to World Road Statistics 2015 published by International Road Federation, Geneva,

- There is lower incidence of deaths per 100,000 in the countries Australia, Canada, France, Japan, Republic of Korea, U.S.A, Poland, Portugal etc. except Russian Federation while comparing it with India. Incidence of road accident related deaths were higher in Russian Federation (19) in comparison to India (11) during the calendar year 2013. (Chart 1.1)

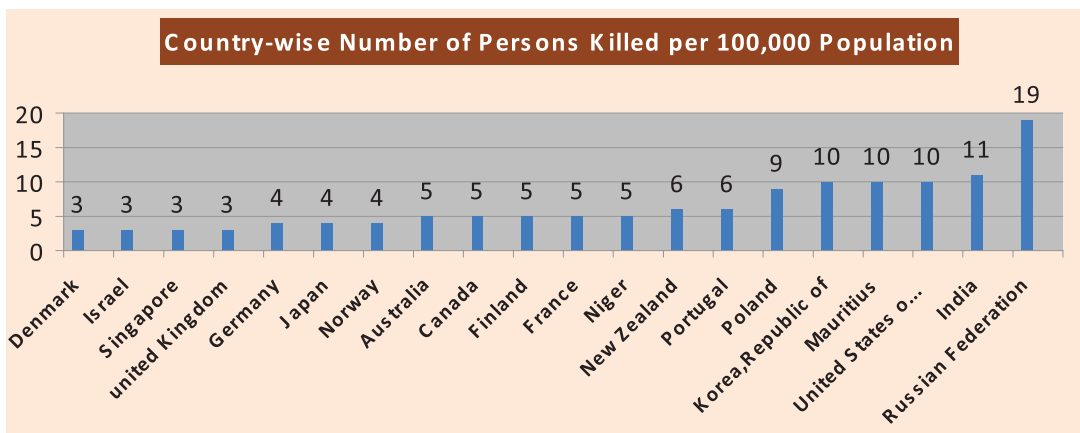


Chart 1.1 (Source : Road Accidents in India 2015 : MoRTH)

Table 1.1 : Cross Country Comparison of Incidence of Road related Deaths and Injury Accidents in 2013			
SL. No.	Country	Killed per 100,000 Population	Injury Accidents per 100,000 Population
1.	Australia	5	N.A.
2.	Canada	5	348
3.	Denmark	3	53
4.	Finland	5	98
5.	France	5	86
6.	Germany	4	361
7.	India	11	40
8.	Israel	3	162
9.	Japan	4	494
10.	Korea, Republic of	10	429
11.	Mauritius	10	199
12.	New Zealand	6	208
13.	Niger	5	36
14.	Norway	4	103
15.	Poland	9	93
16.	Portugal	6	334
17.	Russian Federation	19	142
18.	Singapore	3	119
19.	United Kingdom	3	216
20.	United States of America	10	513
<p>Note: Injury accident refers to road accident resulting in at least one injury or death.  Sources: 1. For India- Transport Research Wing, Ministry of Road Transport &amp; Highways.  2. For Other countries – World Road Statistics, 2015.</p>			

- Injury accidents per lakh of population in India was substantially lower at around (40) during 2013 when compared with other developed countries. United States of America reported the highest figure in respect of injury accidents per lakh population at (513) followed by Japan (494), Republic of Korea (429), Germany (361), and Canada (348). Niger reported the lowest figure in respect of injury accidents per lakh population at (36). A cross country comparison of incidence of road accident related deaths and injury accidents of select countries are given in Table 1.1.

## NATIONAL TRENDS

**During the year 2015 in India 146133 people died and 5,00,279 got injured in 5,01,423 road accidents.**

- Census of India 2011 reported 53 'million-plus' cities. Out of these 53 cities, 50 reported road accident data for 2015. These 50 cities accounted for a share of 22.1 percent in total road accidents in the country, 11.3 percent in total persons killed in road accidents and 16.4 percent in total persons injured. The fatal accidents in terms of percentage remained the same at 12.8 during 2014 and 2015. This is depicted in Table 1.2.

Table 1.2 : Percentage Share of 50 Million plus cities in Road Accidents			
S.no.	Accidents/Deaths/Injuries	2014	2015
1.	All Accidents	22.7	22.1
2.	Fatal Accidents	12.8	12.8
3.	Persons Killed	11.9	11.3
4.	Persons Injured	16.8	16.4

- An important accident related parameter is the extent of accident severity (road accident related deaths per 100 accidents). It varies from a low of **2.6 percent in Mumbai** to a high of **66.0 percent in Amritsar** (Table 1.3). The other cities which reported a very high accident severity included **Ludhiana (55.4 percent), Varanasi (47.9 percent), Asansol – Durgapur (47.1 percent), Allahabad (47.0 percent), and Jamshedpur (45.2 percent)**.
- Out of these fifty Million plus cities **Mumbai reported the highest number of road accidents (23,468) during 2015 as against (22,570) in 2014, while Delhi reported the highest number of Deaths (1,622) due to road accidents during 2015 as against 1,671 during 2014.**
- Accident severity in terms of percentage share of 50 Million plus cities was 14.9 per cent in 2015 as against 15.0 per cent in 2014.

Table 1.3 : Road Accidents Profile of Million plus Cities (2015)						Alphabetical
Sl.No.	Name of Cities	Fatal Accidents	Total Accidents	Killed	Injured	Severity
1.	Agra	498	1143	474	650	41.5
2.	Ahmedabad	318	1837	328	1722	17.9
3.	Allahabad	455	1019	479	698	47.0
4.	Amritsar	94	150	99	89	66.0
5.	Asansol – Durgapur	210	446	210	220	47.1
6.	Aurangabad	153	654	170	670	26.0
7.	Bengaluru	708	4834	713	4057	14.7
8.	Bhopal	222	3621	235	2779	6.5
9.	Chandigarh	124	416	129	331	31.0
10.	Chennai	859	7328	886	7320	12.1
11.	Coimbatore	238	1513	245	1393	16.2
12.	Delhi	1582	8085	1622	8258	20.1
13.	Dhanbad	42	114	48	137	42.1
14.	Faridabad	199	669	206	539	30.8
15.	Ghaziabad	316	826	331	668	40.1
16.	Gwalior	249	2140	265	1703	12.4
17.	Hyderabad	425	2761	425	2382	15.4
18.	Indore	421	5873	444	4685	7.6
19.	Jabalpur	345	3374	365	3216	10.8
20.	Jaipur	452	1894	476	1661	25.1
21.	Jamshedpur	151	347	157	329	45.2
22.	Jodhpur	257	678	297	700	43.8
23.	Kannur	65	624	67	796	10.7
24.	Kanpur	625	1496	665	1077	44.5
25.	Khozikode	150	1487	159	1567	10.7
26.	Kochi	159	2561	168	2721	6.6
27.	Kolkata	412	4347	422	3329	9.7
28.	Kollam	191	1561	204	1601	13.1
29.	Kota	105	745	108	713	14.5
30.	Lucknow	483	1371	526	820	38.4
31.	Ludhiana	260	489	271	324	55.4
32.	Madurai	208	1037	215	1021	20.7
33.	Mallapuram	332	2882	367	3264	12.7
34.	Meerut	372	962	396	721	41.2
35.	Mumbai	586	23468	611	4029	2.6
36.	Nagpur	254	1254	260	1233	20.7
37.	Nashik	225	1301	234	679	18.0
38.	Patna	244	665	261	390	39.2
39.	Pune	419	1443	438	1205	30.4
40.	Raipur	406	2189	448	1431	20.5
41.	Rajkot	136	780	150	716	19.2
42.	Srinagar	59	435	63	462	14.5
43.	Surat	251	903	257	773	28.5
44.	Thiruvanthapuram	159	2199	164	2660	7.5
45.	Thrissur	103	1406	110	1538	7.8
46.	Tiruchirapalli	156	828	161	873	19.4
47.	Vadodra	216	1164	229	984	19.7
48.	Varanasi	200	424	203	225	47.9
49.	Vijaywada city	362	1644	379	1548	23.1
50.	Vizag	343	1637	373	1313	22.8
Total 50 Million Plus Cities		15799	111024	16513	82220	14.9
All India Total		131726	501423	146133	500279	29.1
Note: *Accident Severity: Road Accident deaths per 100 accidents						
Source: ROAD ACCIDENTS IN INDIA 2015: MINISTRY OF ROAD TRANSPORT AND HIGHWAYS						

## TRENDS IN DELHI

**Delhi, the capital city, has the area of 1483 square km. and has the population of around 181 lacs.**

- The **population of the country has been increasing at a fast rate. This rising trend is also affecting the national capital region of Delhi** including its neighbouring towns adversely.
  - The fast pace of economic development and consequent growing opportunities in and around the city has further boosted up migration of population where a **huge number of people continuously migrate into the city in search of employment and livelihood.**
  - **With growth of population, traffic scenario also becomes more challenging particularly with regard to accidents** and to an extent it is a reason for growing accidents.
  - **During the year 2015 – 8085 road accidents occurred in Delhi in which 8258 people got injured and 1622 people lost their lives.**
  - **The accidents are also linked directly to the increase in the vehicular population.** However, with the increased presence and tactical deployment of traffic staff, traffic engineering and other steps taken after in-depth analysis of causes of accidents, the current traffic management strategies/techniques have proved to be effective in reducing number of accidents.
  - **There was decrease in number of fatal accidents in Delhi for the sixth consecutive year.**
- to such an extent that it causes difficulty in smooth movement of traffic at many places particularly during the peak hours.
  - Parking problem is associated with the vehicle boom. There are over **88.2 Lakh registered vehicles of all categories in Delhi for the year 2015.** The yearly **compounding growth of vehicular population for the year 2015 is 6.44%.**
  - Private transport viz. **private cars and two wheelers constitute 96%** of all registered vehicles in Delhi. On the contrary, all categories of buses, which are major source of public transportation, form less than 0.5% of total vehicular population. Public transport is not effective in Delhi as people use their own vehicles thereby over-crowding the city.
  - It has been observed that a majority of **people of Delhi do not strictly follow traffic rules and regulations.** Large number of prosecution figures of almost all types of traffic violations in the city is witness to this fact. **More than 34 lakh challans were issued against the violators in the year 2015.** Even this figure is small in comparison to the violations being committed on daily basis with a substantial number of them going undetected and also in comparison to number of registered vehicles in the city.
  - **Another fact is that the non-Delhi destined commercial vehicles also use the city roads to criss-cross the capital** thereby causing more congestion on roads and accidents too which could be avoided if the long pending projects of Eastern and Western Peripheral Expressways around the city are completed.

### **Some characteristics and problems:**

- **The numbers of vehicles** have reached

- **Another trend of serious traffic concern is the ever-growing congestion, and traffic bottlenecks, which has increased travel time implying that it takes more time for the people to reach to their destinations than usual.** This leads to violation of traffic rules subsequently increase in road rage incidents.
- A large number of accidents involve pedestrians as most vulnerable victims. In 2015, **42.1% of the total people killed in road accidents were pedestrians. Scooter/Motorcycle riders were the second most vulnerable accident prone victims** constituting 34.9% of the total persons killed.
- It is also evident from analysis that **accidents trend to increase after 8 p.m till 2 a.m on all days of week** as during these high congestion hours, commercial vehicles also start moving in Delhi, due to lifting of restrictions of no entry for them. Drunken driving, dark spots also contribute to it.
- Statistics also show that **National highways and major roads of the city** are more accidents prone due to heavy movement of commercial as well as other vehicles.
- The **drunken driving has become a common trend in Metro City's life. It is a very dangerous trend, found mostly in youngsters, which seriously endangers everybody's life and safety.** This is evident from the fact that despite continuous prosecution and special drives against drunken driving, the number of this category of violators is not going down. This often leads to accidents. **A drunken person can be an accused as well as a victim. During the year 2015, a total of 25958 challans for drunken driving were issued.**

Road accidents are an outcome of the interplay of various factors like road network, vehicle and human population, the planning and facilities for different road users, the development of public transport system and the life style of city people. These all together characterize the victims, offending vehicle, time and places of the accidents. The related scenario in Delhi is discussed in detail in subsequent chapters.

