

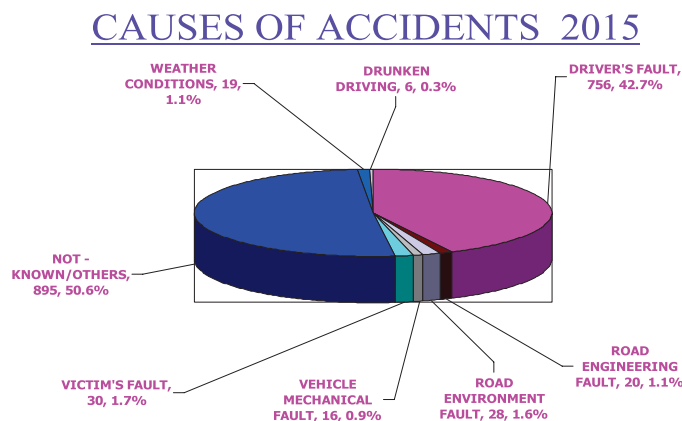
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CAUSES OF ACCIDENTS

In order to prevent accidents, it is necessary to know the causes of accidents that led to such eventuality.

- Since, an accident is a man made tragedy, there is always a lapse on the part of the driver of the vehicle (at fault or victim) directly or indirectly who was unable to have proper control over the vehicle.
 - Simultaneously, other factors or causes also play their part in the occurrence of the tragedy. As such, there may be more than one cause responsible for an accident. There are other human interventions/ reasons besides driver(s) of the vehicle in the occurrence of an accident.
 - These various factors can be broadly categorised into the following:-
 1. Driver's Fault.
 2. Victim's Fault.
 3. Vehicle Mechanical Fault.
 4. Road Environment Fault.
 5. Road Condition / Faulty Road Design/Road Engineering.
 6. Not-known/other.
- There can be more than one of these factors responsible for an accident.
 - An analysis has been done on the causes of fatal accidents that have occurred during the year 2015. **It was found that around 42.7 % of the total causes account for driver's fault.** This is the biggest factor which may also be correlated with the contents at the beginning of this chapter.
 - **In 50.6% of the causes, the real cause was not known. This figure mostly has hit & run cases.**
 - Only 1.6% causes are related to road environment factors while 1.1% are related to faulty road engineering/design.
 - 1.7% causes lead to victim's fault and only 0.9% are due to mechanical fault. {Figure 7.1 (a)}.

Figure 7.1 (a)

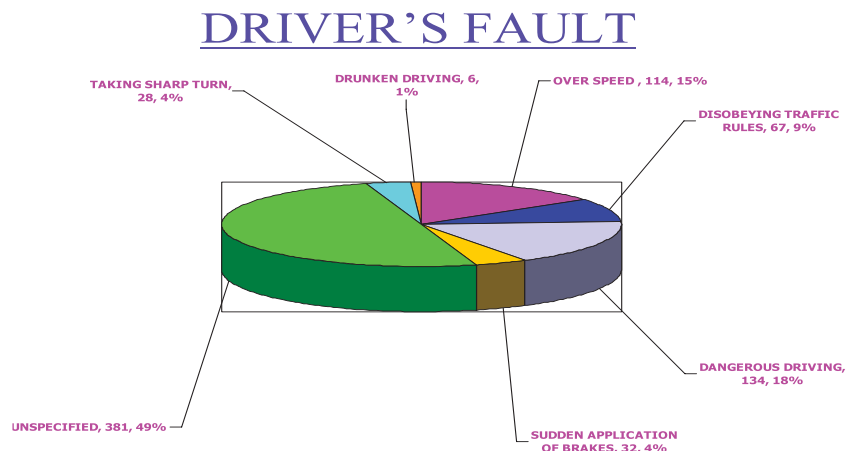


Driver's Fault:

- Driver's fault in this category means the accused driver's fault who is found primarily responsible for committing an accident. This factor can further be broken up into sub-groups as:-
 1. Over speed of Vehicle.
 2. Disobeying Traffic Signals.
 3. Dangerous / Rash driving.
 4. Lane indiscipline.
 5. Sudden Application of Brakes.
 6. Drunken Driving.
 7. While Reversing of vehicle.

- In the analysis of total cases of driver's fault i.e. 762 of accident – considering them as 100%; **18% were caused due to dangerous driving, around 15% were caused due to over speeding** and around 9% were due to disobeying traffic rules and around 4% due to lane indiscipline and 4% due to sudden application of brakes. In around 49% of the driver's fault causes, the fault was not specified. Finally, 6 cases i.e. 1% of the causes of driver's fault were confirmed cases of drunken driving.

Figure 7.1 (b)



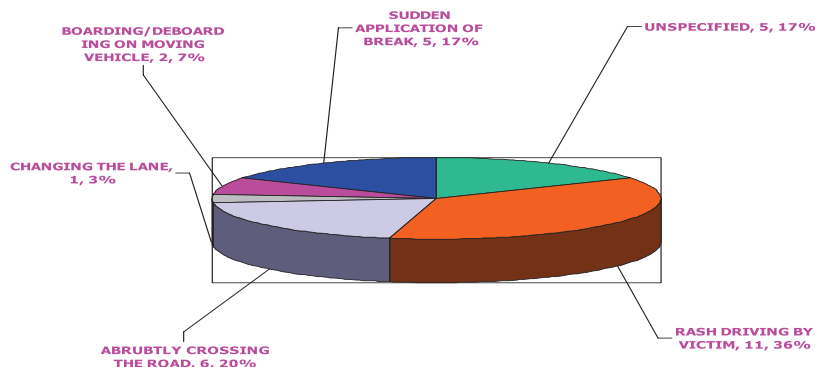
Victim's Fault:

- Victim's fault in this category means the act/omission/lapse etc. on the part of either driver/rider of the vehicle who has sustained damage/injury (or death) due to other impacting vehicle driver's fault or a pedestrian. This factor can further be broken up into following sub-groups as:-
 1. Rash Driving by Victim.
 2. Abruptly Crossing the Road.
 3. Lane indiscipline.

4. Boarding/de-boarding a moving vehicle.
 5. Sudden Application of Brakes.
 6. Victim Vehicle without Light.
 7. Drunken driving.
- In the analysis of 30 cases (1.7% of total causes) of 'victim's fault', it was found that in **36% cases the victims were responsible for rash driving, 20% cases were found to be abruptly crossing the road** while around 17% causes were not specified.

Figure 7.1 (c)

VICTIM'S FAULT



Road Environment Fault:-

- By the term 'Road Environment Fault, we mean the ad-hoc or temporary factors/conditions that existed on road which are not congenial to smooth & safe road traffic and that may lead to an accident. This factor can further be broken up into following sub- groups as:-
 1. Poor Light Condition
 2. Weather condition.
 3. Unguarded civil work etc.
 4. Slippery road.
 5. Light reflection from front.
 6. Encroachment on road.
- An analysis of 28 cases (**1.6% of total causes**) of 'road environment fault' showed that 46% cases were due to slippery road, 14% cases were due to poor light condition, 7% due to bumpy road condition, 4% with hole or pit on road. Around 25% cases of 'road environment fault' were not specified.

Figure 7.1 (d)

ROAD ENVIRONMENT FAULT

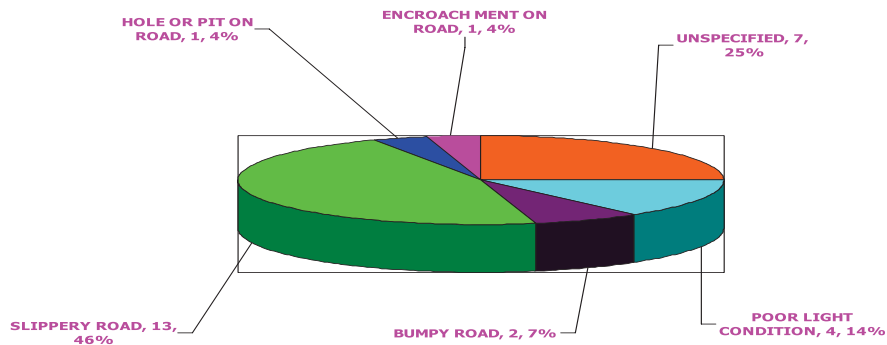
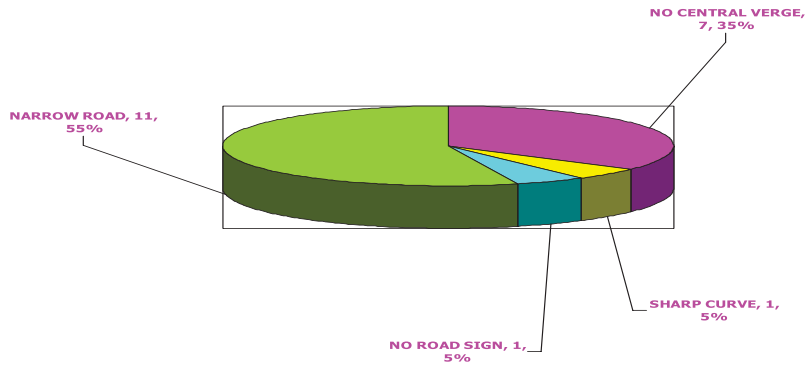


Figure 7.1 (e)

FAULTY ROAD CONDITION / DESIGN



Faulty Road Condition / Design:

- By the term 'Faulty Road Condition / Design', we mean the factors or conditions which are either **part of lay out or design or defects in the construction of road**. These factors/conditions may arise before or after construction of the road which are not congenial to smooth & safe road traffic and may therefore lead to an accident. This factor can further be broken up into following sub-groups as:-
 1. No Central Verge Etc.
 2. Hole or Pit on Road.
 3. Faulty Road Design.
 4. Bumpy Road.
 5. Narrow Road.
 6. Sharp Curve.
- Faulty road engineering/design are responsible for 20 i.e. 1.1% of total causes of fatal accidents in the year 2015. Out of these causes, around 55% fatal accidents were caused due to narrow road, 35% fatal accidents were due to no central verge on road, 5% were due to no road sign on road, 5% were due to sharp curve on the road.

