# Factors responsible for the accidents of the vehicles

Normally 1) Drivers 2) Vehicle, 3) Road and 4) Other factors (Pedestrians, cyclists, bad weather) are the four factors generally responsible for the accidents. But do you know that the vehicle driver is the factor responsible for 70% of the accidents?

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Factors Responsible for the Accidents
Drivers -73 %
Vehicle – 6%
Road – 5%
Other Factors – 16% (Includes Pedestrians, cyclists, bad weather)
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## Types of Accidents :

#### Accidents are mainly four types:

- 1. Accident involving a single vehicle viz skidding of vehicle, vehicle catching fire, Vehicle turning upside down etc/
- 2. Collusion of the vehicles: There are three subtypes
- Head on collusion of two vehicles.
- 4. One vehicle colliding the other from rear side (Rear end collusion)
- 5. Two vehicles brushing each other from sides (Side wise collusion)
- 6. Vehicle dashing the pedestrians
- Vehicle colliding a stationery or immovable object (Wall, electric pole, Bridge parfait wall

#### Accident Prone Spots

Accident prone spots

Spots in the city:

- 1. Controlled and Uncontrolled.Road crossing,
- 2. Spots where pedestrians cross the road (Zebra crossing)
- 3. Bus stops / school and college surroundings

No Entry for Pedestrians : If there is no entry sign for pedestrians, the pedestrians should not try to cross the road

#### Spots in Rural areas

- National Highways (Only 2% of the highways are responsible for 35 % of the accidents
- 2. Ghat roads
- Railway crossings (Accidents occurring here are disastrous)
- 4. Unmounting the road Shoulders (If the gradient of the shoulder is steep and the strip besides is light and dry, or mounting from the side strip to the main road.

## During which period of the year, maximum accidents occur. ?

- Many are under the impression that maximum accidents occur during the rainy season. But actually it is proved that the number of accidents are maximum during the period immediately preceding and succeeding the rainy season. Main reason being that the proportion of traffic increases sharply before the rains to stock the goods and due to exhausting of stocks or to undertake new assignments after the rains.
- Accidents also increase when leaves drop during the autumn season.

# When do accidens occur during the day?

 Night time: In comparison of 24 hours of the day, 45% accidents occur at night despite mere 15% of the total traffic. In other words the probability of accidents occurring at night is 8 times than that of day time. Then just think, how night journey can be avoided. Many a people think that journey will be over in sleeping time at night and work will be finished

#### Avoid Overtaking:

Please take following precautions while overtaking:

Overtaking Prohibited: The said sign is on a blind turn or narrow bridge on the mountain top. Here vehicle from the other side cannot be sighted.

- Please overtake from right side. (except where the vehicle before you is turning to the right side.
- Do not try to overtake at the spots where continuous white or yellow strip exists a blind turn, mountain top, narrow bridge,or anywhere on the road where such instruction is displayed
- Judge the speed and the distance of the vehicle coming from the opposite side before overtaking. Don't leave slightest room for any chance.
- Judge the speed and the length of the vehicle before overtaking it. For example
  a Maruti car can be easily overtaken due to its small size. But if a long drawn
  trailer or two trailers connected with each other are to be overtaken, it will take
  long time to be overtaken. For example Trailers transporting Sugarcane
- Don't overtake any vehicle unless the driver of that vehicle is alerted and he gives a green signal to overtake him.
- Before overtaking, please verify in rear view mirror whether anybody is overtaking you. Many a times we exactly ignore this and then accident occurs

Overtaking Prohibited : IF two continuous yellow or white strip exists at the center of the road, overtaking is prohibited.

- If you are in double minds, whether to overtake or not, or if a slight doubt occurs whether that vehicle can be overtaken, then don't overtake.
- Consider the slope of the road, load of the goods and the size of the vehicle before overtaking. It is easy for a car driver to overtake a truck loaded with

- goods at an ascent Similarly if the truck from the opposite side is on the ascent, it will also take time to come close. Some times the truck is loaded with linear material (viz iron rods, pipes etc). Or sometimes the loaded material peeps outwards from the sides. Think properly before overtaking such vehicles.
- Do not bring your vehicle in the lane of the vehicle you have overtaken till you can see it in your rear view mirror. Some vehicle drivers take a sharp turn to the left immediately after overtaking and create a problem for the driver of the vehicle allowing the overtake.
- Don't overtake at a spot where a road coming from the left meets the main road.
   Because you will be unable to spot the vehicle approaching from the left side road and accident can occur.

When we are overtaking other vehicles, the position of our vehicle is important. If our vehicle is very close to the vehicle in the front, the vehicle from the opposite side cannot be spotted. Many drivers position their vehicles bumper to bumper and frequently judge whether there is sufficient space to overtake by frequently peeping their vehicle outside. Many a times the timing for the vehicle peeping out and timing of the vehicle coming from the opposite direction coincides and accident occurs. Hence our vehicle should be kept at a safe distance from the front vehicle slightly to the right but inside the center line. So that the road forward can be easily sighted and you can proceed further immediately.

Overtaking Prohibited : IF two continuous yellow or white strip exists at the center of the road, overtaking is prohibited.

Speed limit of vehicles as decided by law

### **Speed Limit Chart**

Type of Vehicle	Kilometers Per Hour
Light Vehicle ( C ar jeep etc)	No limit
Two Wheeler Vehicle	50
Taxi / Rickshaw	65
Heavy Vehicle	65
Tempo / tourist Bus	65
Truck Trailer vehicle	50
If this sign on the road, then for all the vehicles	

The oil moves easily Subsequently the wheel cylinders get activated and the vehicle stops due to the friction of the break liners with the drum. I jokingly always say "There are only two things which are instant, one is Maggie and the other is Nescafe. Not the Brake "

Many vehicle drivers drive neck to neck with the front vehicle. It is because they are not aware at what distance the vehicle will stop after applying the brakes. The distance necessary stopping of the vehicle is divided into two parts.

1. When the driver becomes aware of an accident like situation, it takes at least one fourth second in case of a physically and mentally competent and sound person, for the brain to instruct the legs through the neurons to instruct the legs and place them on the brake peddle and applying the brakes. This is known as perception time / Reaction time and the distance covered by the vehicle in three fourth second is known as Thinking Distance.

Just as we maintain distance between our two children, similar distance should be maintained between the two vehicles as well.

57 meters. Vehicle Stons here

30 meters

Minimum Distance required for stopping the vehicle

27 meters

13 mtre

13 mus	13 mirs 27 meters 39 meters 57 meters vehicle Stops here				
6.5 meter		17 meters	25 meters	40 meters	Distance covered by the vehicle after applying the brakes Driver starts applying the Brake
6.5 meters		10 mtrs	14 meters	17 meters	Distance covered by vehicle till the drivers legs reach the brakes Driver senses danger
32 kms/ h 48 kms/h 64 km/hr 80 km/ hr					

This distance can increase if:

- If the brakes of the vehicle are not efficient
- If the tyres of the vehicle have worn off
- If the road is slippery and the weather is bad
- If the driver is not physically and mentally competent
- 2. The distance covered by the vehicle till the brakes are applied. (Actual braking distance).

In short, the time required for stopping the vehicle = Distance covered by the vehicle till the legs reach the brake peddle + distance required for the vehicle coming to a standstill after the brakes are applied..

When you double your speed, the braking distance increases four fold.

While driving like Lord Shrikrishna, you should be alert and concentrate on many things at a time.

- Condition of the road (potholes, sand, speedbreakers, oil leaked on the road etc)
- Vehicle coming from the opposite side (its distance, speed etc)
- Rear View mirror . one gets alert to the vehicle coming from behind.
- The vehicle overtaking our vehicle
- The pedestrians, cyclists and other factors on the road
- The traffic signs and signals on the road
- Various gauges on the dashboard

Off course the attention of the driver should not be diverted towards other things than the above. Because that slight diversion can be the reason of a serious accident

• Driving the vehicle when physically or mentally unfit: If the driver is suffering from serious disorders like high blood pressure or fits, or if he drives the vehicle recklessly reacting to a shocking news or exciting news, there is a possibility of accident. Driving the vehicle after consuming liquor is not only dangerous but also a crime by law. Similarly if vehicle is to be driven after consuming any drugs prescribed by the doctor, it should be ensured that consuming of such drugs does not result into drowsiness. Even a cough syrup (Fensideal) or a cold tablet can result into drowsiness.

Liquor consumption + Driving = Invitation to Death

Consumption of liquor or narcotic drugs develops pseudo self confidence. There is a very wrong notion amongst the Indian drivers that a peg or two of liquor brings freshness. Liquor is a stupefying substance.

Biggest enemies on the Road Liquor, Speed and Overload

There is a rampant misconception that the influence of liquor withers away if tapped on the face. Time alone can reduce the influence of liquor.

Following are the effects, if Vehicle is driven under the influence of liquor,

- Driver cannot control the speed. Intermittently he keeps on increasing or reducing the speed.
- Judgments about overtaking or maintaining safe distance from the vehicle in the front go wrong.
- Vehicle cannot remain under control at tough turns,.
- The vehicle driving is zigzag.
- Hand and leg movements slow down and sight reduces (Reaction time increases
- Drivers take wrong decisions under over confidence.
- Due to slow momentum, blunders like not putting the head lights on, vehicles

standing on road cannot be seen, turning without signaling can happen

**NO HORN:** This sign is displayed near the hospitals, court.

- Rash Driving: Rash Driving has not been defined in the Motor Vehicles Act. But there are no two opinions about rash driving and over confidence being the primary causes of accidents. Now let us see, what is meant by rash driving.
- Driving the vehicle at high speed thoughtlessly despite improper conditions of the road and road conditions.
- Driving at high speed even though the vehicle is not in good condition.
- Driving the vehicle at high speed despite bad weather conditions.
- Driving the vehicle at high speed despite improper physical and mental condition of the driver.
- Driving the vehicle at high speed making distorted steering movements
- Driving the two wheeler hands free showing circus.
- Fatigue and sleep: One of the main reasons for accidents. The Attention, vigilance, perception and decision controlling center of the brain is adversely affected due to fatigue. The person becomes numb. A nap suddenly occurs while driving at the steering wheel. Mostly the body emits signals of sleep before such a nap or drowsiness. But many drivers ignore it. They warn themselves that they are not supposed to sleep or wait for a rest and in any case he has to reach that place The owners of certain trucks and passenger buses compel the drivers to drive the vehicle day and night without bothering for their driver's rest. While some traders if the driver reaches the vehicle at a particular spot.

**Stop:** If this sign is there, the driver should stop the vehicle. The vehicles on the main road should be given preference and we should proceed further after verifying that there is no danger.

Please ensure the following before embarking on a journey:

- There is adequate petrol.
- Checking the engine oil and brake oil.
- Checking the water / coolant in the radiatior
- Ensure that the fan belt is in good condition
- Check all the tyres and the stepne and carry the jack and tool kit along.
- Ensure that wiper, head light, parking light, brake light, indicator and horn is in working condition
- Checking all the gauges on the dashboard.
- To maintain water at appropriate level in the battery
- Washing and cleaning the wind screen
- Carrying extra spark plug, fan belt, petrol filter, point, bulb for a long journey.
- Moving the vehicle to and fro for checking of brakes
- Most important keep all the concerned documents of the vehicle with you.

#### Documents of the vehicle

It is mandatory for the driver to keep the following documents of the vehicle with him

Private Vehicle	Commercial vehicle
1 Registration Certificate (RC Book)	Following two documents in addition to the documents necessary for the private vehicles.
2. Tax book	
3 Insurance certificate	
4 Driver's license	Fitness certificate
5. Pollution under control certificate	2. Permit

Two wheeler parking space: If there are belts on the road at this spot, vehicle should be parked inside the belt. If odd and even dates are mentioned, park the vehicle in that direction only.

#### Other Factors:

The fourth important factor responsible for the accidents is the pedestrians on the road, cyclists, bullock-carts etc. Their speed is low in mixed traffic.

# Safety of the passengers:

#### Passengers in the bus::

- Many passengers wait on the road instead of waiting in a Q at the bus stop.
   Naturally the bus stops in the middle of the road.
- Nobody obeys a general rule that the alighting passengers should be allowed to exit first.

#### (An illustration)

Always alight the vehicle from the left side

If you open the right side door while alighting the vehicle, keep in mind that a car coming from behind may hit you. Always remember the safety mantra to always alight from the left side of the vehicle.

- Accidents occur due to peeping of the body, hands head etc out of the vehicle.
- Most important: Do not speak with the driver or do any act which may divert his attention / create chaos.
- Do alight or try to enter a running bus.
- One more important precaution: Do not cross the road without seeing on both the sides after alighting the bus.

#### Passengers in the car

- Ensure that the doors of the car are closed and properly locked. Many accidents
  occur when the door of a car in motion suddenly open and the passenger is
  thrown on the road.
- Don't forget to tighten the seat belts. It has been proved in America in a research that the death rate of passengers in accidents has reduced by 22% due to the using of seatbelts alone.
- Always alight from the left side of the car. Don't alight from the right hand side.

• Don't play with the steering wheel / gears / hand brakes of a stationery vehicle.

(AN illustration)

Even if it is an age to play, it is not the place to play

Compulsory proceed ahead or turn left.

Pedestrians:

Pedestrians face the maximum danger on the road. Hence it is necessary to take the following precaution:

- Always use footpath to walk on the road.
- If there is no footpath on the road, walk from the right side of the road facing the vehicles coming from that side. Hence the danger of an unknown vehicle driver coming from behind and hitting is avoided.

(An illustration)

Legs are not vehicles

Left side is not for the legs

Left side is for the vehicles

Right side is for the legs

Walk from the right side of the road facing the vehicles

- Keep a watch on the pot holes, and fruit peels on the road
- Don't play on the road and don't stand in the middle of the road chatting with each other.
- Always use white belts while crossing the road.
- While crossing the road
- First stand still.

**Zebra Crossing:** On spotting a pedestrian, the vehicle driver should stop before the stop line. Pedestrian get the first preference.

- Then first see to the right.
- Then see to the left.
- Then again see right and cross the road slowly and alertly if the road is free.
   Don't run.
- The pedestrians should not cross the road at the turning.
- The Pedestrians should not cross the road between the parked vehicles.

# **Cyclists:**

Bicycle is the smallest vehicle on the road. Hence it faces the maximum dangers. But it is the vehicle which takes the maximum risks. A small mistake can prove fatal. Hence the cyclist should drive the cycle very cautiously obeying all the rules.

- Blcycle should be driven on the left had side of the road
- Avoid using bicycles on busy streets.

(An illustration

If you catch hold of a truck chain to save a few peddles, a time may come that you may

not be there to peddle the bicycle again

**No Parking:** This sign is displayed on roads with heavy traffic, intersections, bus or railway stations etc. If the vehicle is parked in this place, the vehicle may be confiscated and may be fined.

- Don't try to catch hold of the chain of a truck in motion to avoid a few efforts.
- Don't carry anybody on the front bar or rear carrier of the bicycle. Don't carry heavy goods (for example gas cylinder, long pipes etc.) on the bicycle.
- Don't entangle any thing to the handle which makes it difficult to turn (e.g. large can)
- Keep both the hands on the handle. Don't drive the bicycle with a baby or an umbrella in one of your hand. Don't drive hands free making a circus on the road.
- Take special precaution on the turnings, intersection and when the road is wet.
   Indicate Hand Signal to the pedestrians, vehicles coming from behind and opposite side before taking a turn. Do drive the bicycle in speed.
- If there is a group of cyclists, they should drive the bicycles one after the other instead of driving parallel to each other.
- Fit reflector on the rear side of the bicycle.
- Indicate proper signal and see rear to the shoulder before turning.

Ideal Vehicle Driver (Illustration of Manners on Zebra Crossing)

Its my Duty Thank you Zebra crossing is for the pedestrians. Respect them

We have seen that the driver is responsible for 70% of the accidents. Hence it is the need of the hour to create ideal drivers to change the mindset of the drivers. The whole burden of road transport is on them. To become a safe (ideal ) driver following qualities are necessary

- Experience
- Skill to drive the vehicle
- Appropriate road sense and the conditions on the road.

It is not possible that all the three qualities will exist in a new driver. So experience to drive the vehicle is necessary .But apart from these three

Stopping or parking of Vehicles Prohibited : The vehicle cannot be stopped at this spot for even a moment.

Qualities, there are other qualities which should exist in a new driver right from the beginning. They are as follows:

- Sense of responsibility
- Restraint
- Capacity to concentrate the mind

- Capacity of anticipation
- Presence of mind
- Firm confidence about self driving and the vehicle which he isdriving.
- Care courtesy and consideration of other factors on the road.
- Minimum technical knowledge about the vehicle

It is necessary to be aware about the significance of all the above qualities. Let us see how to acquire the skill to drive the vehicle out of the first three qualities.

#### **How to Avoid Accidents**

The accidents can generally be classified into following categories

- Our vehicle hitting the vehicle before us.
- Vehicle behind us hitting our vehicle
- Accidents occurring at the intersection
- Accidents occurring at the turnings.
- Head on collusion of the two vehicles.
- To avoid our vehicle hitting the vehicle before us, please consider the following things.
- Please assume that the vehicle driver before us can suddenly apply the brakes without giving any signal and create problems for us
- Pay attention whether such a condition is created that the vehicle driver before us is compelled to suddenly apply his brakes.
- Despite good brakes, road and safe vehicle driver, lot of distance is required for the speeding vehicle to stop
- Don't stop the vehicle applying the brakes suddenly, despite being aware of where it is to be stopped. Stop it by gradually reducing the speed of the vehicle anticipating it in advance.

Do not play with your car. It will take you too far.

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- Take the following precautions to avoid the hitting of the vehicle behind us to our vehicle
- Indicate clearly to the vehicle driver behind you so that he can understand your signal and then stop the vehicle.
- Do not stop applying the brakes suddenly.
- Make a habit of stopping the vehicle by gradually reducing the speed. So that the driver behind will get sufficient time.
- If the vehicle driver behind you is driving neck to neck with you, reduce the speed of your vehicle and allow him to overtake you. Avoid rivalry.
- To avoid accidents at the intersection of the two or more roads, implement the following instructions.
- Shift the foot on the accelerator to the brake.
- Keep a close watch on both the sides, while approaching the intersection. First look to the right. After ensuring there is no danger, take the vehicle forward looking to the left..
- Bear in mind that the other vehicle driver can create problems for us by doing an

unexpected thing

- To avoid the accidents on the turning :
- Reduce the speed of the vehicle
- Judge the sharpness of the turn and control the speed of the vehicle accordingly
- Ensure that no vehicle driver is overtaking from the left side, while taking a left turn.
- The left turn should be close and the right turn should be taken maintaining appropriate distance. .
- While turning to the left take care that the vehicle should be to the left of the center line.

Don't play on the roads. Don't invite the accidents.

# The future of the nation is in your hands. Why loose your life ? 115 / We and accident

However the right turn should not be taken closely. Short cut should be avoided.

- Operate indicators and give hand signals before taking a turn.
- Head on collusion of the vehicle.: Such accidents generally occur while overtaking. To avoid this
- Judge the speed of your vehicle, the vehicle which you are going to overtake and speed and distance of the vehicle approaching from the opposite side
- Before overtaking, ensure that no other vehicle is overtaking you
- Turn the vehicle to the left of the road after you view the vehicle overtaken by you in the rear view mirror.
- Don't overtake out of rivalry.

#### Driving the vehicle in the rains

Everybody likes the rains after the extremely hot summers. Its fun driving the vehicle in the rains.! But nobody desires the accidents in the rainy season. The driver should make the following changes in himself at the approach of the rainy season

• The first rains are dangerous for the driver. The vehicle definitely skids due to the mixture of mud, and grease and oil leaked on the road.

Sharp downslope: Don't climb down putting off the engine or keeping the vehicle in neutral gear.

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- The visibility is reduced due to the dew drops on the wind screen. Similarly more
  distance is required since the road is wet. If brakes are harshly applied on a
  slippery and wet road, or if steering is suddenly turned or if accelerator is
  suddenly pressed, the vehicle skids.
- Use headlights during the day time also in case of heavy rains.
- Take care of the cyclists and pedestrians during the rainy season. Their priority is to save themselves from the dropping rains and hence they can ignore the traffic rules.
- The most dangerous thing on the Indian roads is the potholes.

Driving the Vehicles in the Ghats

- Don't put off the engine while unclimbing the ghats. Or don't use the neutral gear. It can prove very dangerous.
- Give way to upcoming vehicles.
- Keep a close watch on traffic signs and signals. Alert the vehicle driver coming from the opposite side by using horn during day time and light during the night time.
- Don't overtake the vehicle on a tough turning.
- Don't stop the vehicle in the ghat. But if the vehicles fails use both hand brake and uti
- Most Important: Climb down the ghat in the same gear in which you climbed up the ghat. So that the danger of fading away of the gears due to constant use can be avoided.

I had seen such an accident when working at Nasik RTO office

Mountains are pleasure if you are driving with leisure.

#### Helmet:

Don't think it as a compulsion. It is necessary. If you want to save life, use helmets.

- In 68% of the accidents, two wheeler drivers pass away in the accidents due to head injury.
- If the helmet using two wheeler drivers are compared with two wheeler drivers not using the helmet, the possibility of two wheeler drivers not using the helmet dying in the accidents is three times that of helmet using two wheeler drivers
- Possibility of injury to the lateral part and the forehead is more than the head part
- An ISI certified helmet should be opted for. The outer covering of the helmet should not be made of metal. It should be of fiberglass or polycarbonate.
- Helmet should be light weight. The weight should not exceed 800 grams.
- The polystyrene padding inside the helmet should be of 10 mm minimum thickness. It is most important from safety point of view.
- Helmet should be fitting the head. (It should not be undersized or oversized)
  Please check if it moves after wearing by keeping hands on the ears from
  outside. Also see whether it moves after applying the chin belt. Don't take it if it
  comes out of the head.
- Most important: Don't avoid tying up the chin strap of the helmet. Else it is of no
  use wearing a helmet. One survey has shown that 42% of the helmet users do
  not tie the chin strap tightly. If the chin strap is not tightened, in case of an
  accident, the helmet will go off the head at a long distance and the head will hit
  the ground.
- The helmet should be of light and shining color to be easily visible during the

night time. It should be of cream, yellow, light blue, white, yellow color. It gets less hot in the heat. People buy dark colored red or black helmets since they look attractive, but it is wrong.

- A radium sticker should be stickered at the back side of the helmet. But if the
  external covering is made up of polycarbonate, the gum in the sticker can
  adversely affect the polycarbonate. In this case, sticker should not be applied.
- The life span of the helmet is 4 to 5 years. In extreme climatic conditions like India, the heat, cold and rain make the outer covering brittle. It develops small cracks, unvisible to the naked eye. Hence helmet becomes useless. Hence new helmet should be purchased every four to five years. In our country we can see people using only one helmet for generations together.
- Helmet is a delicate thing even if it appears tough. It can become useless if it falls from a height of 4-5 feet. The external covering is brittle.
- There are misunderstandings and prejudices in the minds of the people. For
  example neck injury occurs if helmet is used or low speed moped vehicle drivers
  need not use helmet. There is no substance in this contention. On the contrary
  use of helmet can avoid neck injury. Similarly if a moped driver travelling at
  speed of 15 kms / hour is hit on the head, it can prove fatal.

## What exactly happens if a seat belt is used?

If the seat belt is properly tied at the shoulder and the laps, the human body is fastened tightly at its place and hence the speed at which the body may move forward is reduced and the head or the chest do not hit any hard substance. The possibility of a person using seatbelts surviving is 70% in an accident as compared to person not using seatbelts.

One more benefit of the seat belt is you are not thrown out of the vehicle and the control of the car is in your hands till the end. All the passengers remain in their seats and they don't hit each other.

Airbags (Supplementary Restraint systems)

What is airbags?

Airbags are known as Supplementary Restraint systems. It means that the main control system is the seatbelt. If airbags system is existing in the car, but if you don't use seat belts, it will not be useful, perhaps it is more dangerous. Airbags enhance the protection offered by the seat belts. Air bags are fitted in the center of the steering in front of driver and in the dashboard in front of the passenger seat besides the driver seat

# How do airbags provide protection?

60% of the persons dying in accidents involving head on collusion die because of getting trapped in the steering or by hitting the dashboard or windscreen. After the head

on collusion, the passengers in the vehicle are going at that speed and the steering and dashboard get pressed inside. At this moment, the chest and head of the driver and the front seat passengers does not hit the steering or dashboard.

- Are the airbags necessary? or will it suffice if only seatbelts are used? The use of seatbelts is definitely beneficial. But it is not sufficient. Because if there is a head on collusion despite the belts, passengers can be seriously injured by hitting on the dashboard or the steering. Seatbelts definitely reduce the chances of accident, but does not eliminate it totally. The using of both seatbelt and the airbags can definitely save life.
- At what speed collusion, do air bags work?
   Generally the design of the airbags is such that they work even if the head on collusion of the vehicle is at a speed of 20-25 kms / hour. If the vehicle is hit from rear or side, or slight front hit, airbags do not open.
- Do airbags really save lives?
  Yes definitely. It is observed that the proportion of accidental deaths of the
  drivers and the passenger besides them is reduced by 28 percent after the
  airbags are made mandatory.

#### Save Fuel.

Fuel cannot be saved merely by giving slogans or hoisting banners and advertisements. The driver should know what should be done and he should behave accordingly. If the driver remembers following minor things, fuel can be saved.

- The leakage of petrol, diesel pipe or tank should be stopped.
- Good quality caps should be fixed on the petrol / diesel tanks. (Do not tie a cloth). The fuel will not jump out or will not get evaporated.
- There should be proper air pressure in the tyres.
- Don't drive the vehicle with your foot on the clutch ( Clutch driving )
- Use appropriate gears from time to time.
- Tune up your vehicle from time to time.
- Air cleaners should be kept clean.
- Please check whether the wheels of the vehicles have jammed due to half applied brakes.
- Keep the idling speed of the engine to the minimum
- Wared engine should be overoiled. Else the consumption of petrol and diesel will increase.
- Ensure that the clutch does not slip. Else the power of the engine will be wasted. Wore off clutch fingers should be changed immediately.
- If silencer has closed due to carbon depositing, clean it or change it.

Oceans are formed drop by drop. So save diesel .

- Use good quality engine oil.
- Do not use brakes frequently. Lessen the speed of the vehicle, in due

- anticipation. It is no use applying the brakes suddenly despite spotting danger and speeding it up.
- Don't drive the vehicle at full speed. As the speed increases, more and more fuel is used.
- If the vehicle is driven at a speed of 40 to 50 kms / hour, the average of the vehicle increases per liter of petrol or diesel consumed.

• Don't load the vehicle beyond its loading capacity.

NO	Wrong Habits of the Drivers	Percentage of drivers
1	Driving the speed with full speed	42%
2	Driving the vehicle rashly and wrecklessly	31%
3	Suddenly accelerating	30%
4	Starting the vehicle in a gear ( Jump start)	12%
5	Applying the brakes suddenly without anticipating the next stop ( Not slowing down the vehicle well before)	37%
6	Changing the gears without using the clutch	39%
7	Not using proper gears in accordance with the speed	30%
8	Driving the vehicle with foot on the clutch	27%
9	Pressing the clutch before applying the brakes	12%
10	Unnecessarily keeping the engine on,	12%

# Night Driving: Dangers and safeguards.

Earlier we have seen that in comparison of 24 hours of the day, the traffic at night is only 15%. But 45% accidents occur. In short, the possibility of accidents occurring at night is seven times. Question is why this happens.? If there are less vehicles on the road at night, then why the accidents are more? The reasons are as follows:

If an annoyed or dejected or ailing person consumes liquor in small quantity, the alcohol level in the blood increases considerably. In short, vehicle should not be driven even for minute quantities of alcohol consumed.