



## GUIDE FOR ROADS SAFETY & DEFENSIVE DRIVING

PUBLISHED BY

**NATIONAL ROAD SAFETY ORGANISATION**

“DRIVE SAFE – HAPPY FAMILY”

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## **Preface**

**Most of the people especially families intends to go for a small trips during weekends for their holidays. The destination planned using motor vehicle cannot be reached without using the roads. Defensive driving is very important which keeps family entertaining forever. Use of Road in a safe and sensible manner is ROAD SAFETY.**

The Event based on TSD (Time-Speed-Distance) format are organized for the section of people at different place. “REMEMBER THIS IS A DRIVE / RIDE FOR ROAD SAFETY” (Total Entertainment for family & educating on Road Safety).

## **INTRODUCTION – ROAD SAFETY**

If you've been out on the roads, you know that not everyone drives well. Some people speed aggressively. Others wander into another lane because they aren't paying attention. Drivers may follow too closely, make sudden turns without signaling, or weave in and out of traffic.

Aggressive drivers are known road hazards, causing one third of all traffic crashes. The best strategy to deal with road rage is to get out of the driver's way as soon as it's safe to do so and keep lots of distance between you. But inattentive driving is becoming more of a problem as people "multitask" by talking on the phone, texting or checking messages, eating, or even watching TV as they drive. We can't control the actions of other drivers. But learning defensive driving skills can help us avoid the dangers caused by other people's bad driving.

No moving vehicle is ever completely free of the possibility of involvement in an accident. Even a vehicle being driven on a straight dry road on a clear day risks an accident. That's why it is important to recognize potential accident situations in time and adjust to them and avoid an accident.

***“As per Times of India publication on 12<sup>th</sup> September 2009 “Cars Kill most youth globally” states that “Increased availability of vehicles and alcohol, along with youthful recklessness, have made road accidents No.1 cause of dead among young people below 24 years of age. i.e. Traffic accidents account for 14% of Male and 5% of Female deaths”.***

## ***What is Defensive Driving ?***

Defensive driving or safe driving is a precautionary attempt from the driver's side to avoid accidents and risky situations. One can always take a safer side to stay away from any type of road nuisances. And this can be achieved by implementing a variety of general rules and practicing specific driving techniques.

### **Here are some of the useful tips that might help to practice defensive driving:**

- Pay attention while driving to recognize and avoid the hazards waylaying on the road. Being conscious and alert is the most important behaviour expected from a good driver.
- Be very careful while using mobile phone, smoking or handling any other device that will distract from driving. Always adjust the volume of a car radio to a decent level.
- Maintain safe distance between your car and the car ahead. Many accidents happen due and it is very common in highways.
- Drive within speed limits and remember that the provided speed limit is followed.
- Strictly follow the traffic rules. Don't get impatient and accelerate on the yellow signal instead of waiting for the signal to turn green.
- Try to have a safe drive from your end. Never make effort to overtake other cars on the way.
- Look ahead and drive, scan the road and the surrounding area at least a few yards ahead.
- Don't drink and drive as it impairs the ability to operate the vehicle properly.
- Always try to have an escape route and have frequent checks on your mirrors every few seconds to see what's behind and beside the car.
- Learn when to use headlights. Turn your headlights on in dim daylight, rain, or other low-visibility weather conditions and always remember to use turn signals.
- Keep the tyres in good condition and ensure that they have plenty of tread.
- Be cautious when passing stopped or slow-moving vehicles. They often hide dangers that are not immediately apparent.
- Avoid frequent lane changes and try to match the speed with the flow of nearby traffic. Be careful of potholes in the roads.
- Always be extra conscious while driving in raining season as skidding is very common to happen during rains.
- Get out of the car and take a break if tired while driving long distances, rest for a while and proceed further.
- Always wear a seat belt, even if the vehicle is equipped with an airbag.
- Keep a proper driving position with upright posture and both hands on the steering wheel.

## **One of the ultimate solutions for defensive driving is “Travel Time Management”:**

Mostly people say time is money! But life which is more precious. Remember some body cares for U.... and it is not money.

For any destination what ever the mode of transport, plan your trip keeping in mind traffic sense and roads you are taking and time taken. Even if there is pile up or traffic jam, be cool which leads to good health. Do not over-extend or over-schedule yourself. There are only 24 hours in a day after all!

### **ALWAYS GIVE RIGHT OF WAY:**

Right of way is defined as “ a privilege of the immediate use of the roadways”. These rules spell out who should be where, when and which vehicles should yield to another vehicle at any particular time or place. You know that you never have the right of way until another driver yields it to you.

Yield right of way to all vehicles on your right at all times. When entering a road right at all times. When entering a road intersection, if there is a “dead-slow-major road ahead” sign, yield right of way to vehicle approaching you from your left also.

### **OBSERVE LANE DISCIPLINE:**

As a defensive driver, you must follow lane discipline. Lane markings do two important things. They ensure that the available road space is used to the best possible advantage and they guide traffic on the path of safety.

Every road has lanes, whether marked or not. Where they are not marked, divide the road into appropriate lanes in your mind’s eye. Plan your course so that sudden changes are avoided and never move from one lane to another without good reason. A defensive driver never weaves in and out of lanes.

### **EXPECT THE UNEXPECTED:**

Be prepared to meet all kinds of drivers during the course of a day. Their driving leaves much to be desired and they frequently control you with an accident prone situation in which you must constantly adjust your driving to avoid an accident.

You, the defensive driver, cannot assume that the other driver will be as considerate as you are and that he will respond to the traffic rules as you do. On the contrary, if you expect reckless, illegal and thoughtless actions from the other driver, you will be better prepared to adjust your driving so as to prevent accidents.

## **TRAFFIC TIPS FOR SAFER TRAVEL:**

A long car journey can take its toll on even the most hardened of travelers and a breakdown or traffic jam will just add to that. There are some steps you can take which can help alleviate the stress and fatigue of a long trip - some of which are already familiar, others which maybe new to you.

### **Planning the Journey:**

A little knowledge goes a long way: when planning your route, take into account the times of day when you'll be passing through busy towns (avoid rush hours) and where there are road works.

### **Preparing for the Trip:**

The first thing to consider is 'is your car ready to go?' Breakdowns and accidents are often attributed to poor car maintenance and below is a quick reminder of what to check. Bear in mind that there are plenty of garages service providers who will undertake all the car checks for you if you don't want to do it yourself.

**Tyre Tread** - The minimum, legal tread depth for tyres is 1.6mm, though most motoring organisations recommend maintaining a tread depth of at least 3mm. Worn tyres give a higher chance of aquaplaning in the wet, affect the handling of the car and make your stopping distance much longer.

**Tyre Pressure** - the wrong pressure affects steering and braking. If tyres are under-inflated they will wear more quickly or in the wrong places and cause the problems listed above. If you've lots of luggage and extra passengers, the required tyre pressure will be different. And don't forget to check the spare wheel and the jacking equipment.

**Engine** - Check water/coolant (anti freeze in cold weather) and oil levels to prevent over-heating and engine failure.

**Windscreen and Lights** - ensure the windscreen washer reservoir is full and that wiper blades are not split or worn. Lights must be clean and fully working to meet legal requirements.

## **Staying Fresh**

Fatigue affects your concentration, can make you less tolerant of other drivers and increase your chances of having an accident. Stay fresh by taking regular breaks and sharing the driving - swap regularly so the passenger isn't at the same point of weariness. Avoid heavy meals and alcohol, which can make you lethargic.

If you do start to feel sleepy try and stop for a 15 minute nap, two cups of coffee or high energy drinks containing caffeine and turning the radio up might also help.

Sometimes it's difficult to tell just how tired you are. If you have any of the following symptoms it's time for a break:

- You keep yawning
- You start to feel stiff
- Your eyes feel heavy
- You find yourself day-dreaming or staring at the car in front
- The car wanders out of your lane

## **Taking Care of your Passengers:**

Passengers need breaks too, research has shown it's possible to develop Deep Vein Thrombosis (blood clotting) on a car journey of as little as four hours. Passengers may be more prone to travel sickness, so make sure they avoid reading and keep their eyes focusing straight ahead. Bright sunshine can affect you and your passengers so try sunscreens, sunglasses and keep the car cool with air conditioning if you have it.

**“Children in cars can make a journey much more stressful, but can also be great fun”**

## **SOME FUNDAMENTAL TRAFFIC LAWS:**

1. Keep left, allow traffic in the opposite direction to pass you on the right.
2. Overtake only on the right.
3. Overtaking on the left is permitted only when the car in-front is about to turn right.
4. Overtaking is not permissible, if it is likely to cause inconvenience or danger to the other traffic or where the road ahead is not visible.
5. When being overtaken or passed by another vehicle do not increase your speed or try to prevent the other vehicle from passing you.
6. Slow down when approaching intersections, road junctions or road corners. Enter the intersection or junction if it does not endanger any one.
7. When entering a main road from a junction give way to the vehicles proceeding along the main road. Give way to all traffic approaching the intersection on your right hand. If there is a "Dead slow-major ahead" sign, yield right of way to the vehicles on you left also.
8. Drive slowly when passing a procession or when passing road repairs. In any case your speed should not exceed 30 Km per hour.
9. When turning to the left drive close to the left hand side of the road.
10. When turning to the right draw to the centre of the road, stop, if necessary, at the intersection, then move to the left half side of the road you are about to enter.

## **KEEP SAFE FOLLOWING DISTANCE:**

Always maintain a safe following distance to avoid a collision, in case the vehicle ahead of you stops suddenly. Observe "two-second" rule. Maintain a gap of at least two seconds between your vehicle and the vehicle in front. Start counting when the vehicle ahead passes a fixed object such as a tree, telephone pole, or a sign board – count "One Thousand and one, one thousand and two", that is "two seconds". If your vehicle reaches the fixed object before you stop counting, you are too close. Slow down. This will widen the gap. Then check your following distance once more. Double or triple the "Two-second" gap if the road is wet or visibility is poor.

***"Remember, observance of the above rule ensures safe following distance at any driving speed".***

## **DRINKS, DRUGS AND DRIVING:**

Apart from legal problems, drinks and drugs lead to any one of all of these—

1. Loss of power to judge speed of your car and speed of other vehicles.
2. Loss of power to judge safe distance for over taking or stopping.
3. Dilation of eyes resulting in poor vision.
4. Slower reactions.
5. Replacement of normal fear of consequence by over-confidence leading to foolish chances being taken and
6. Temporary loss of knowledge of safety rules.

## **CAR CARE:**

- The best guides to car care is the operator's manual of your car. The care of your car must not be left to others entirely.

### **Cleanliness:**

- Wash wheels daily. Clean lamp and other glasses, engine and care interior daily. Cake up mud and oil under chassis could add to the fuel and repair bills.

### **Nuts and Bolts:**

- Check the mountings of all systems and tighten nuts and bolts periodically.

### **Lubrication:**

- Use lubricants recommended by the manufacturer. Check lubrication personally. A mission or faulty grease nipple should be pumped in till all the old grease comes out . Oil changes should not be left to mechanics to decide. Check the oil for viscosity by taking a few drops between the thumb and forefinger. If the oil is merely black in colour, change only the oil filter elements. Many service stations never use an oil can. Insist on it. An oil spray under chassis is no proof that your car has really been services.

### **Paint:**

- Mud and rust can eat into metal Holes appearing on the doors show that the water drawn holes are blocked. Check floor drain holes too. Paint both sides of the floor board and inside doors. Similarly radiator tanks and the petrol tank need to be painted.



## Special Maintenance:

- Engine oil and radiator need topping up.
- Brakes need adjustments and refilling of brake fluid.
- Batteries need distilled water and acid.
- Tyres need correct pressure and rotation.

Look up your care manual for a complete list.

Some parts of care wear out very fast. The most expensive ones are tyres, tubes, batteries and brake shoes. Filter elements, fan belts, rubber hoses, spark plugs, copper carbon rushes, fuses, bulbs, etc., also require frequent renewals, but cost little.

When summer comes, check all rubber in the care and replace if required. Check tyres and tubes carefully.

For winter and rainy reasons, frequency check clean electrical and ignition systems.

## PETROL-SAVING TIPS:

- **Don't speed:** The ideal driving speed is 40 -50 Kms per hour. You can get 35% extra mileage at 40 Km per hour as opposed to 80 Km per hour.
- **Ensure proper maintenance:** Poor maintenance may increase fuel consumption by 15% mainly due to three factors:
  - (i) Low tyre pressure
  - (ii) Retarded spark timing and misfire
  - (iii) Petrol overflowing into the carburetor.

Improper wheel alignment or defects in brake-system can also increase fuel consumption.

- **Maintain correct tyre pressure:** A 25% decrease in tyre pressure can cost you
  - 5% to 10% more on petrol and 25% on tyre life.
- **Use gears correctly:** Incorrect use of gears can lead to increase in fuel consumption. Start vehicle in first gear only. Use higher gear for starting only if you are in a muddy patch or going down hill. Get into top gear as soon as possible.
- **Avoid rush-hour traffic:** Your vehicle engine consumes double the normal fuel on a highly congested road. Take a less congested road even if it is slightly longer.

- **Anticipate stops:** Driving with your foot on the brakes can increase your fuel consumption. Anticipate stops and slow down gradually.
- **Use clutch carefully:** Unnecessary use of clutch lead to loss of power and petrol. Replace clutch liners immediately if they are worn out. Stop the engine when you stop your vehicle.
- **Idling wastes petrol:** If your battery, dynamo, self-starter and fan belt are in good condition, you can easily switch off at halts over a minute and restart again.
- **Don't wait to warm up:** Instead, drive in low gear till the engine warms up. Don't use the choke longer than necessary. Also never park your car so that you have to reverse with the cold engine.

**“PRACTICE DEFENSIVE DRIVING AND KEEP YOUR HAPPY FAMILY”**

**“HEALTH IS WEALTH, WEALTH IS NOT HEALTH”**

## **SUMMARY**

### **ROAD SAFETY – DEFENSIVE DRIVING**

Road safety is a result of contributing efforts from all the sectors of the society including both civilians and Govt. officials. So, some tips can be fruitful in this direction.

1. Don't use your mobile phone while driving.
2. Don't drink and drive
3. Always adhere to speed limits
4. Take special care about children, senior citizens and pedestrians.
5. Don't drive if tired.
6. Pedestrians should walk cautiously
7. Always observe and anticipate other road users
8. Keep your distances.
9. Always wear helmets and seat belts

#### **Basic Safety for All Travelers:**

- ✧ Understand local “road culture”.
- ✧ Choose the safest form of transportation.
- ✧ Avoid night road travel
- ✧ Carry a cell phone and keep contact information for emergencies.

**Walk Safe :**

- ✧ Be aware of traffic patterns.
- ✧ Be alert to reckless driver behaviors.
- ✧ Wear reflective clothing at night, bright clothing by day.
- ✧ Avoid walking where you cannot be easily seen.
- ✧ Be alert at intersections .

**Ride Safe :**

- ✧ Avoid overcrowded, overweight and top-heavy buses, minivans and taxis.
- ✧ Be alert for reckless driving.
- ✧ Insist that driver be responsible. Be prepared to disembark at first safe opportunity.
- ✧ Avoid riding with drivers who seem to be under influence of alcohol or medication, or appear over-tired, irrational or distracted.
- ✧ Ride only in taxis with functional seat-belts in back seat.
- ✧ Avoid hitchhiking.

**Drive Safe:**

- ✧ Check if vehicle meets basic safety standards.
- ✧ Check tires (tread and pressure), headlights, wipers, brakes.
- ✧ Get information about local highway hazards, customs and driving conditions.
- ✧ Familiarize yourself with controls if you are driving friends vehicles
- ✧ Avoid motorcycle, scooter and moped travel. Insist on a wearing helmet or bring your own.
- ✧ Do not use cell phone while driving.

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