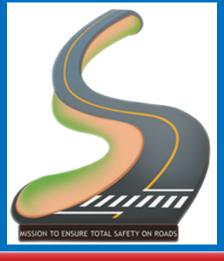
SAFE SAVARI

Newsletter on Road Safety ∩ αίρας

राष्ट्रीय परिवहन योजना एवं अनुसंधान केंद्र

ദേശീയ ഗതാഗത ആസൂത്രണ ഗവേഷണ കേന്ദ്രം



Volume V, Issue 2

April - June 2015

From the Directors desk ...

The carriers of hazardous materials, when involved in a road accident may lead to disastrous consequences like fire, explosion, spillage and leakage, resulting in a number of fatalities and injuries besides property loss and environmental pollution. Drivers of vehicles carrying dangerous goods must attend a basic training course dictating how these goods must be transported and how to use an Emergency Response Plan to manage accidents or safety issues. They must hold an appropriate certificate issued by the competent authority or by an organisation recognised by that authority. Government of Kerala accorded sanction to NATPAC for conducting three days 'Training Courses for Drivers of Vehicles Carrying Dangerous and Hazardous Goods' and one day refresher course vide G.O.(Rt) No.138/2015/ Tran., dated 17th March 2015. The State level inauguration

of the programme was done by Shri. Thiruvanchoor Radhakrishnan, Hon'ble Minister for Transport and Forest, Environment, Sports and Cinema, Govt. of Kerala on 16th April 2015 at Sasthra Bhavan, Pattom, Thiruvananthapuram. This training will make drivers aware of hazards arising during the carriage of dangerous goods and to give them basic information indispensable for minimising the likelihood of an incident taking place. This will enable them to take measures which may prove necessary for their own safety, for that of the public and the environment, and for limiting the effects of an incident.

Training Course for Drivers of Vehicles Carrying Dangerous and Hazardous Goods

Due to unprecedented growth of chemical Industries, the prportion of hazardous chemicals in total freight traffic is increasing at a rapid rate. Of the carriers that carry hazardous goods, approximately two-third of them carry flammable petroleum products including Kerosene, Petrol, LPG, Naphtha etc.



Inauguration of Training on Safe Transportation of Hazardous Goods to Drivers by Shri. Thiruvanchoor Radhakrishnan, Hon'ble Minister for Transport, Forest, Environment, Sports and Cinema, Government, of Kerala



Dr.B.G.Sreedevi, Director, NATPAC welcoming the participants

of The such substances accident movement is more prone than the movement of other goods. When involved in a road accident, this may cause consequences like fire, explosion, injuries etc. in addition to property loss and environmental pollution. Government of Kerala accorded sanction to NATPAC for conducting three day 'Training Course for Drivers of Vehicles Carrying Dangerous and Hazardous Goods' vide G.O. (Rt) No.138/2015/Tran., dated 17th March 2015.



Presidential Address by Dr.Suresh Das, Executive Vice President, KSCSTE

Key Note Address by Smt.R.Sreelekha IPS, Transport Commissioner

The State level inauguration of the programme *'Training on Safe Transportation of Hazardous Goods to Drivers'* was done by Shri. Thiruvanchoor Radhakrishnan, Hon'ble Minister for Transport, Forest, Environment, Sports and Cinema, Govt. of Kerala on 16th April 2015 at Sasthra Bhavan, Pattom, Thiruvananthapuram. The inaugural session was attended by Smt. R. Sreelekha IPS, Transport Commissioner, Govt. of Kerala; Dr. Suresh Das, Executive Vice President, KSCSTE; Dr.B.G.Sreedevi, Director, NATPAC and Dr.G. Ravikumar, Scientist - F, NATPAC.

In the technical sessions that followed, presentations in the areas of Accident Scenario, Defensive Driving Techniques, Advanced Driving Skills, Fire Fighting, Class Label, Hazchem Code, Product Information, Emergency Procedure, Driver Fitness and Vehicle Fitness and Driving Emergencies were made. Fire demonstration and Tanker Truck demonstration were also arranged for the participants. 60 drivers participated in the training programme.



Fire Fighting Demonstration Tanker Truck demonstration
Two Programmes were completed after the inauguration during this period.

- K Karunakaran Transpark, Aakkulam
 21st 23rd May 2015. (2nd Batch)
 48 drivers participated.
- K Karunakaran Transpark, Aakkulam 16th 18th June 2015. (3rd Batch) 32 drivers participated.



Participants of Ist batch with faculties



Participants of IInd batch with faculties



Participants of IIIrd batch with faculties

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Road Safety Youth Leadership Programme

NATPAC in association with Kerala State Youth Welfare Board organised a one day Road Safety Youth Leadership Programme for the Public and Youth Associations at Azhoor Grama Panchayath Hall, Kollam on 29th April 2015. The programme was inaugurated by Smt. Vijayakumari, Vice President, Azhoor Panchayath. 75 youth co-ordinators including ladies attended the training.

Road Safety Training for Various User Groups

- i) 'Road Safety Education Programme for students' as part of Summer Vacation Camp organised by Sree Narayana Gurukulam, Varkala on 6th April 2015.
- ii) 'Namukke Yengane Surakshitharakam' for school children as part of Summer School 2015 organised jointly by Kerala State Council for Science Technology and Environment (KSCSTE) and State Central Library, Thiruvananthapuram on 27th April 2015.
- iii) 'Road Safety Education Programme for students' at Mar Thoma Higher Secondary School, Chungathara, Malappuram on 15th May 2015.
- iv) 'Safe Driving Skills and Traffic Rules' for drivers at State Excise and Research Centre Academy, Thrissur on 22nd – 23rd May 2015.
- 'Training on Safe Driving Practices and Circulars and Guidelines issued by the Government on Safe Transportation of Educational Institution Buses and Eye Camp' for school bus drivers, conductors and attenders at Ideal International English School, Kuttippuram on 26th May 2015.
- Training on Road Safety in connection with the Passing Out Ceremony of 108 Road Safety Wardens of Marthoma Higher Secondary School, Chungathara on 19th June 2015. The programme was inaugurated by Shri.P.V.Abdul Vahab, Hon'ble MP.
- vii) 'Road Safety Education Programme for students' at Govt. UPS, Poovachal, Kattakkada on 23rd June 2015.
- viii) Training on Road Safety for general public in association with Mala Police Station, at Thrissur on 26th June 2015.

Safe Road to School

NATPAC in association with Kerala Road Safety Authority organised one day programme on 'Safe Road to School' (SRS) at selected schools. They are:

- i) Govt. U. P. School, Poovachal
- ii) Meladoor Govt. Samithy Higher Secondary School, Mala Police Circle, Thrissur in connection with the inauguration of School Protection Group - a Kerala Police initiative.

23.06.2015

25.06.2015

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SRS Programme at Meladoor Govt. Samithy HSS Thrissur



Road Crossing Wardens at Govt. UP School, **Poovachal**

Exhibitions

- i) Road Safety Exhibition and audio-visual programmes at Sree Gurukulam Nursing College, Neyyattinkara, 10th – 12th April 2015.
- ii) Road Safety Exhibition and audio-visual programmes at Govt. Polytechnic College, Neyyattinkara, 12th June 2015.



അഞ്ച് വയസ്സ് വരെയുള്ള കുട്ടികൾക്ക് വേണ്ടി

രക്ഷിയക്കൾക്ക് എന്തു ചെയ്യാം?

സുരക്ഷിതമായി ഇരിക്കാവുന്നതിൽ കുടുതൽ ആളുകൾ ഓട്ടോയിൽ സഞ്ചരിക്കരുത്

വിപരീതമായി പ്രവർത്തിച്ചാൽ, അപ്രതീക്ഷിതമായി സംഭവിക്കാവുന്ന കുലുക്കങ്ങൾ നിമിത്തം നിങ്ങൾ പുറത്തേക്കു വീഴാൻ സാദ്ധ്യതയുണ്ട്



ചുവപ്പ് – നിർത്തുക ചുവപ്പ്ലൈററ് കണ്ടാൽ വാഹനം നിർത്തി പച്ച സിഗ്നൽ കാണുന്നതുവരെ കാത്തു നിൽക്കുക



പച്ച – പോവുക പച്ച ലൈററ് കണ്ടാൽ പാത് സുഗമമാണെങ്കിൽ വാഹനം മുന്നോട്ടുപോവാം മററുരീതിയിലുള്ള നിയന്ത്രണങ്ങൾ ഇല്ലെങ്കിൽ മുന്നോട്ടോ വശങ്ങളിലോട്ടോ പാവാം



സ്റ്റോപ്പ് ലൈനിന് പിന്നിലായി വാഹനങ്ങൾനിർത്തുക

ഓട്ടോറിക്ഷയിൽ സഞ്ചരിക്കുമ്പോൾ ശ്രദ്ധിക്കേണ്ട കാര്യങ്ങൾ

ചെറു പ്രായത്തിലുള്ള ഈ കുട്ടികളെ വളരെ സൂക്ഷിച്ച് റോഡ് മുറിച്ച് കടക്കാന ഓട്ടോറിക്ഷയിൽ സഞ്ചരിക്കുമ്പോൾ വാഹനത്തിന്റെ ഇടതു വശത്തുകൂടെ മാത്രം കയറുകയും ഇറങ്ങുകയും ചെയ്യുക

> ഓടിക്കൊണ്ടിരിക്കുന്ന ഓട്ടോയിൽ കയറുകയോ അതിൽനിന്ന് ഇറങ്ങുകയോ അരുത്

വാഹനം ഓടിക്കൊണ്ടിരിക്കുമ്പോൾ കൈകളും തലയും പുറത്തു കാണത്തക്കരീതിയിൽ സഞ്വരിക്കുകയും അരുത്





് റോഡ് മുറിച്ചു കടക്കുമ്പോൾ നിങ്ങൾ എന്താണ് ചെയ്യുന്നത് എന്ന് നിങ്ങളുടെ കുട്ടിയോട് വിശദികർ എപ്പോഴാണ് നിങ്ങൾ സുരക്ഷിതരായി ഗോഡ് ച്യറിച്ചു കടക്കാൻ തീരുമാനിക്കുന്നത് എന്ന് മനസ്സിലാക്കാൻ





Analysis of Road Accident Causative Factors

Truck - Car Accident at Kuthiran, Thrissur

Kuthiran curves, located on Vazhukkumpara - Irumbupalam road stretch of National Highway 544 in Thrissur District witnessed a road crash on May 12th, 2015 resulting in the loss of four human lives including two children. Three vehicles were involved in the The car (Maruthi 800) tried to overtake the two commercial vehicles, a 3-axle loaded truck and a loaded Swaraj Mazda LCV. The mishap occurred when the LCV, which was moving in front, applied sudden brakes seeing a vehicle from the opposite direction executing an overtaking maneuver. The car which had already overtaken the 3-axle truck had to come in between these two goods vehicle on seeing the opposite lane traffic at the same instant. The car driver would have applied the brakes on seeing the sudden stoppage of LCV, was apparently rammed by the 3-axle truck from rear and was sandwiched between the two loaded goods vehicle.

Officials from NATPAC visited the accident spot on 15th May 2015. As per Police FIR, the rash and negligent driving of the 3 axle truck driver was the reason for this fatal incident. The spot analysis shows that the major reason for this particular accident was the overtaking of the Maruti car while maneuvering a sharp curve of radius around 60m which had a continuous centre line indicating a no-overtaking zone. driver was intending to overtake the two goods vehicles ahead but could not complete the process due to the opposite traffic and had to squeeze itself between the two. At the same instance the leading vehicle (mini truck) stopped abruptly on seeing a vehicle in the opposite direction on his lane, which caused the car driver to brake instantly and was immediately rammed by the 3 axle truck from behind. The accident would have been less severe if the truck was going at a safe speed and had reduced his speed on seeing the car overtaking it.

Deficiencies in road alignment or design were observed at the Kuthiran curves including the accident spot on the Vazhukkumpara - Irumbupalam road stretch of NH- 544. Inadequate width of the carriageway, absence of side shoulders and extra widening for curves, inadequate sight distance, shoulder drop, poor road markings and signs etc were the major contributing factors of accidents on this road stretch.

Considering the increasing number of accidents and deaths that has occurred in this stretch several remedial measures were suggested by NATPAC. Extra-widening on curves



Maruthi 800



3-axle Container Truck



Swaraj Mazda LCV

Condition of vehicles after crash

and adequate shoulder width (1.5m on both sides) should be provided. Provision of warning sign boards, appropriate road markings, road side edge barriers, conveying ban on overtaking to motorists before entering and along the curves, conveying the availability of safe overtaking zones ahead to motorists through roadside/overhead signboards, variable message signs, etc., implementation of speed restriction measures, strict enforcement to check whether ban on overtaking and restriction on speed are done by motorists were recommended by the Centre. Pavement surface, road side elements, road signs and markings should be periodically monitored and well maintained. Awareness programs aimed at discouraging such rash driving has to be carried out by the concerned agencies.





Accident Location at Kuthiran

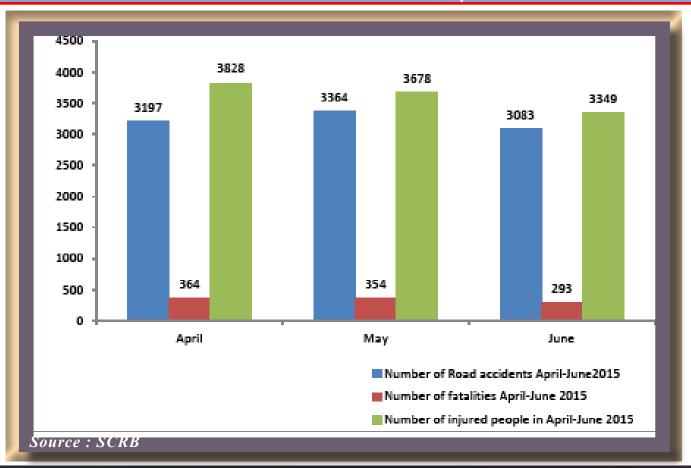
'Dangerous goods' are materials or items with hazardous properties which, if not properly controlled, present a potential hazard to human health and safety, infrastructure and/ or their means of transport.

Nine Classes of Hazardous Materials

- 1: Explosives
- 2: Compressed Gas
- 3: Flammable Liquids
- 4: Flammable Solids
- 5: Oxidizing Substances
- 6: Toxic or Infectious Substances
- 7: Radioactive Materials
- 8: Corrosive Materials
- 9: Miscellaneous Hazards



Road Accident details of Kerala (April - June 2015)



Limit Speed for your own SAFETY

Life is short, DON'T RUSH IT



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Dr.B.G.Sreedevi Director NATPAC

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