

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
RAJYA SABHA
STARRED QUESTION NO-183
ANSWERED ON-20/12/2023

TECHNOLOGY TO MITIGATE ROAD ACCIDENTS

183. SHRI NARESH BANSAL:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) the number of deaths in road accidents by human error & natural calamity, every year, during last three years specially in Uttarakhand cases by land slide, vehicle off road, Vehicle plunges into deep gorge, etc.;
- (b) the measures taken by Government to reduce road accidents;
- (c) whether Government has identified accident prone spots on National Highways, specially in hill region of Uttarakhand;
- (d) if so, details thereof, State-wise;
- (e) whether data and analytics is increasingly being used the world over to identify accident prone spots; and
- (f) if so, how Ministry is planning to implement different technologies to avoid road accidents?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (f) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (f) OF THE RAJYA SABHA STARRED QUESTION NO. 183 FOR ANSWER ON 20.12.2023 ASKED BY SHRI NARESH BANSAL REGARDING TECHNOLOGY TO MITIGATE ROAD ACCIDENTS

(a) As per the Report “Road Accidents in India, 2022” published by Ministry based on data received from Police Department of States/UTs, road accidents occur due to multiple causes such as over speeding, use of mobile phone, drunken driving/consumption of alcohol and drug, driving on wrong side/ lane indiscipline, jumping red light, non-use of safety devices such as helmets and seat belts, vehicular condition, weather condition, road condition, fault of driver/cyclist/ pedestrian etc.

As per data of Police Department of Uttarakhand State, number of road accident fatalities in the State classified according to traffic rule violations for the last three years is given below :-

Category	2020*		2021*		2022	
	Fatalities	% share	Fatalities	% share	Fatalities	% share
Over-speeding	450	66.77	595	72.56	782	75.05
Drunken driving/ consumption of alcohol & drug	6	0.89	4	0.49	7	0.67
Driving on wrong side/Lane indiscipline	48	7.12	47	5.73	49	4.70
Use of mobile phone	0	0.00	0	0.00	1	0.10
Others	170	25.22	174	21.22	203	19.48
All India	674	100	820	100	1042	100

*Covid 19 affected Years

(b) Ministry has formulated a multi-pronged strategy to address the issue of road safety based on Education, Engineering (both of roads and vehicles), Enforcement and Emergency Care. Accordingly, various initiatives have been taken by the Ministry as annexed at **Annexure-I**.

(c) and (d) Based on data received from Police Department of States/UTs, Ministry has identified accident prone spots on National Highways. A total of 5803 black spots have been identified based on accidents data for the period from 2016 to 2018. State-wise details is annexed at **Annexure- II**.

(e) and (f) Ministry has developed e-DAR application, which is a central repository for reporting, management and analysis of road accidents data to enhance road safety in the Country. The application has been rolled out in all States and UTs for live data entry.

The Motor Vehicles (Amendment) Act, 2019 enacted in August, 2019 provides for electronic monitoring and enforcement of road safety. Accordingly, Ministry has published rules in August, 2021 for Electronic monitoring and Enforcement of Road Safety at High Risk and High Density Corridors on National Highways, State Highways and at critical junctions in major cities with more than one million population.

Advanced Traffic Management System (ATMS) is presently installed in high traffic density National Highways and National Expressways such as Delhi-Meerut Expressway, Trans-Haryana, Eastern Peripheral Expressway etc. by National Highways Authority of India (NHAI). ATMS has provisions for various electronic enforcement devices which help in speedy identification of incidents on the highway stretches and effectively monitor the highways, thereby improving the response time of the on-site assistance.

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF RAJYA SABHA STARRED QUESTION NO. 183 FOR ANSWER ON 20.12.2023 ASKED BY SHRI NARESH BANSAL REGARDING TECHNOLOGY TO MITIGATE ROAD ACCIDENTS

Details of various initiatives taken by Ministry to address the issue of Road Safety are as under :-

(1) Education:

- i. Ministry administers Road Safety Advocacy Scheme to provide financial assistance to various agencies for raising awareness about road safety and for administering road safety programs.
- ii. Ministry administers a scheme for setting up of Institutes of Driving Training & Research (IDTRs), Regional Driving Training Centres (RDTCs) and Driving Training Centres (DTCs) at state/district level across the Country.

(2) Engineering (both of Roads and vehicles)

2.1. Road engineering:

- i. Road Safety Audit (RSA) of all National Highways (NHs) has been made mandatory through third party auditors/experts at all stages i.e. design, construction, operation and maintenance etc.
- ii. High priority is accorded to identification and rectification of black spots /accident spots on NHs.
- iii. Road Safety Officer (RSO) has been designated at each Regional Office of road owning agencies under the Ministry to look after RSA and other road safety related works.
- iv. Ministry has issued guidelines for the provision of signages on Expressways and National Highways by incorporating best practices and International standards to offer improved visibility and intuitive guidance to the drivers.
- v. Section 198A of the Motor Vehicles Act, 1988 provides for responsibility of any designated authority, contractor, consultant or concessionaire for the design or construction or maintenance of the safety standards of the road, as may be prescribed by the Central Government from time to time.

2.2 Vehicle engineering:

Ministry has taken various initiatives to make vehicles safer, including the following:-

- i. Mandatory provision of an airbag for the passenger seated on the front seat of a vehicle, next to the driver.
- ii. Prescribed norms related to safety measures for children below four years of age, riding or being carried on a motor cycle. It also specifies use of a safety harness, crash helmet and restricts speed to 40 kmph.
- iii. Mandatory provisions for fitment of following listed safety technologies: -

For M1 category vehicles:

- Seat Belt Reminder (SBR) for driver and co-driver.
- Manual Override for central locking system
- Over speed warning system.

For all M and N category vehicles:

- Reverse Parking Alert System

iv. Mandated Anti-Lock Braking System (ABS) for certain classes of L [Motor vehicle with less than four wheels and includes a Quadricycle], M [Motor vehicles with at least four wheels used for carrying passengers] and N [Motor vehicles with at least four wheels used for carrying goods which may also carry persons in addition to goods, subject to conditions stipulated in BIS standards] categories.

v. Mandated speed limiting function/speed limiting device in all transport vehicles, except for two wheelers, three wheelers, quadricycles, fire tenders, ambulances and police vehicles.

vi. Published the rules for recognition, regulation and control of Automated Testing Stations, which define the procedure for fitness testing of vehicles through automated equipment and the procedure for grant of fitness certificate by ATSSs.

vii. Formulated the Vehicle Scrapping Policy based on incentives/dis-incentives and for creating an ecosystem to phase out older, unfit a polluting vehicles.

viii. A Scheme to set up one model Inspection & Certification Centre in each State/UT with Central assistance for testing the fitness of vehicles through an automated system.

ix. Published rules regarding the Bharat New Car Assessment Program (BNCAP) to introduce the concept of safety rating of passenger cars and empower consumers to take informed decisions.

(3) Enforcement:

i. The Motor Vehicles (Amendment) Act, 2019 provides for strict penalties for ensuring compliance and enhancing deterrence for violation of traffic rules and enforcement through use of technology.

ii. Ministry has notified rule for electronic monitoring and enforcement of Road Safety

(4) Emergency care:

i. Ministry has notified rules for the protection of Good Samaritan, who in good faith, voluntarily and without expectation of any reward or compensation renders emergency medical or nonmedical care or assistance at the scene of an accident to the victim or transports such victim to the hospital.

ii. Ministry has enhanced compensation of victims of Hit and Run motor accidents (from Rs.12,500 to Rs.50,000 for grievous hurt and from Rs. 25,000 to Rs. 2,00,000 for death).

iii. NHAI has made provisions for ambulances with paramedical staff/Emergency Medical Technician/Nurse at toll plazas on the completed corridor of National Highways.

ANNEXURE REFERRED TO IN REPLY TO PART (c) and (d) OF RAJYA SABHA STARRED QUESTION NO. 183 FOR ANSWER ON 20.12.2023 ASKED BY SHRI NARESH BANSAL REGARDING TECHNOLOGY TO MITIGATE ROAD ACCIDENTS

State-wise details of Black Spots: -

Sl. No	State	No. of Black Spot identified
1	Andhra Pradesh	466
2	Arunachal Pradesh	5
3	Assam	95
4	Bihar	64
5	Chandigarh	6
6	Chhattisgarh	142
7	Delhi	113
8	Goa	29
9	Gujarat	250
10	Haryana	23
11	Himachal Pradesh	116
12	Jammu & Kashmir	64
13	Jharkhand	58
14	Karnataka	551
15	Kerala	243
16	Madhya Pradesh	303
17	Maharashtra	25
18	Manipur	5
19	Meghalaya	1
20	Mizoram	2
21	Nagaland	17
22	Odisha	169
23	Punjab	296
24	Rajasthan	349
25	Sikkim	10
26	Tamil Nadu	748
27	Telangana	485
28	Tripura	8
29	Uttar Pradesh	405
30	Uttarakhand	54
31	West Bengal	701
Total		5803
