

Road Safety

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For Prelims: Road Safety, Urbanization, Anti-lock braking system, Vulnerable Road Users, Radar gun, E challan, Brasilia Declaration on Road Safety, National Highways Authority of India Act

For Mains: Road Safety: Significance, Impacts, Causes, Related Initiatives, Steps that need to be taken.

Why In News

Recently, the National Crime Records Bureau's Accidental Deaths & Suicides in India (ADSI) report showed that 1.55 lakh individuals died in accidents on India's roads in 2021, up from the 1.33 lakh deaths in the pandemic lockdown year of 2020.

What is the Significance of Road Safety?

- Road transport is the dominant mode of transport in India, in terms of traffic share and in terms of contribution to the national economy.
- To meet the demand for road transport, the number of vehicles and the length of road network have increased over the years.
- A negative externality of expansion in road network, motorization and urbanization in the country is the increase in road accidents and road crash fatalities.
- Road traffic injuries are one of the leading causes of death, disabilities and hospitalization in the country imposing huge socio-economic costs.

What is the Impact of a lack of Road Safety?

- Economics:
 - India loses 3% of its GDP due to road accidents, most of which are preventable.
- Social:
 - Burden on Households:
 - Every road accident death causes depletion of nearly seven months' household income in poor families and pushes the kin of victims into a cycle of poverty and debt.
 - Vulnerable Road Users (VRUs):
 - VRUs bear a disproportionately large burden of road crashes and account for more than half of all road crash deaths and serious injuries in the country.
 - It is often the poor, especially male road-users of working age, that constitute the category of VRUs.
 - Gender Specific Impact:
 - Women in the families of victims bore the burden across poor and rich households, often taking up extra work, assuming greater responsibilities, and performing caregiving activities.
 - According to World Bank's report "Traffic Crash Injuries and Disabilities: The

Burden on Indian Society, 2021.

- About **50% of women were severely affected** by the **decline in their household income after a crash.**
- About 40% of women reported a change in their working patterns post-accident, while around 11% reported taking up extra work to deal with the financial crisis.
- The income decline for low-income rural households (56%) was the most severe compared to low-income urban (29.5%) and high-income rural households (39.5%).

What are the Causes of Road Accidents?

- Infrastructural Deficits: Pathetic conditions of roads and vehicles, poor visibility and poor road design and engineering including quality of material and construction.
- **Negligence and Risks:** Over speeding, driving under the influence of alcohol or drugs, tiredness or riding without a helmet, driving without seatbelts.
- Distraction while Driving: Talking over mobile phones while driving has become a major cause of road accidents.
- **Overloading:** To save on the cost of transportation.
- Weak Vehicle Safety Standards in India: In 2014, crash tests carried out by the Global New Car Assessment Programme (NCAP) revealed that some of India's top-selling car models have failed the UN's frontal impact crash test.
- Lack of Awareness among people regarding the importance of safety features like airbags, Antilock Braking system etc.

How can Road Accidents be Controlled?

Transparent Machinery:

 With <u>E-challan</u> implementation, corruption can be decreased for the compensation of traffic infringement fines.

Speed-Detection Devices:

- Installation of proven speed detection devices such as Radar and speed detection camera systems can be introduced.
 - Chandigarh and New Delhi have already implemented the service of speed detection devices such as digital still cameras (Chandigarh), speed cameras (New Delhi), and Radar gun (New Delhi) in traffic control.
 - Radar Gun is a handheld device used by traffic police to estimate the speed of a passing vehicle.

Improved Safety Measures:

 Speed humps, raised platforms, Roundabouts, and optical markings can reduce road accidents to a great extent.

Stricter Rules and Heavy Fines:

 In order to reduce violations of traffic rules, heavy motor vehicle fines can be imposed on the violators specially when driving under the influence of liquor, cannabis or another drug.

Vehicular Safety Standards:

- Vehicle safety features such as electronic stability control, effective Car Crash Standards and advanced braking should be made mandatory.
 - Recently, the Ministry of Road Transport and Highways introduced <u>Bharat NCAP</u> (New Car Assessment Programme).

Role of Bystanders:

 Bystanders play a major role in post-crash care. They contribute by activating the emergency care system and taking simple, potentially life-saving actions until professional help is available.

Training and Capacity Building:

 Training courses and training workshops should be organized for building capacity in road safety audits and road safety engineering.

What are the Initiatives Related to Road Safety?

Global:

- Brasilia Declaration on Road Safety (2015):
 - The declaration was signed at the second Global High-Level Conference on Road Safety held in Brazil. **India is a signatory to the Declaration.**
 - The countries plan to achieve Sustainable Development Goal 3.6 i.e. to halve the number of global deaths and injuries from road traffic accidents by 2030.
- Decade of Action for Road Safety 2021-2030:
 - The UN General Assembly adopted resolution "Improving global road safety" with the ambitious target of preventing at least 50% of road traffic deaths and injuries by 2030.
 - The Global Plan **aligns with the** <u>Stockholm Declaration</u>, by emphasizing the importance of a **holistic approach to road safety.**
- The International Road Assessment Programme (iRAP):
 - It is a registered charity dedicated to saving lives through safer roads.

India:

- Motor Vehicles Amendment Act, 2019:
 - The Act hikes the penalties for traffic violations, defective vehicles, juvenile driving, etc.
 - It provides for a Motor Vehicle Accident Fund, which would provide compulsory insurance cover to all road users in India for certain types of accidents.
 - It also provides for a National Road Safety Board, to be created by the Central Government.
- The Carriage by Road Act, 2007:
 - The Act provides for the regulation of common carriers, limiting their liability
 and declaration of value of goods delivered to them to determine their liability for
 loss of, or damage to, such goods occasioned by the negligence or criminal acts of
 themselves, their servants or agents and for matters connected therewith or
 incidental thereto.
- The Control of National Highways (Land and Traffic) Act, 2000:
 - The Act provides for the control of land within the National Highways, right of way and traffic moving on the National Highways and also for removal of unauthorized occupation thereon.
- National Highways Authority of India Act, 1998:
 - The Act provides for the constitution of an authority for the **development**, **maintenance and management of NHs** and for matters connected therewith or incidental thereto.

What can be the Way Forward?

- **Behavioral Changes:** Increasing motorcycle helmet use, increasing seatbelt use and increasing child restraint use. Awareness regarding the influence of alcohol on driving.
- Post-Crash Response and Effective Trauma Care: Simple and affordable post-crash care interventions can save lives.
 - Effective care for the injured requires timely care at the scene, prompt transport to appropriate emergency and surgical care at the hospital, and early access to rehabilitation services.
- **Safe Roads:** Safety consideration during the planning, design, and operation of roads, can contribute to reducing road traffic deaths and injuries.
- Vehicular Safety Standards: Vehicle safety features such as electronic stability control, effective Car Crash Standards and advanced braking should be made mandatory.
- Awareness and Publicity: Mass media and social media should be used effectively for spreading awareness about road safety.
- **Training and Capacity Building:** Training courses and training workshops have been organized for building capacity in road safety audits and road safety engineering.

