

India's population-adjusted road deaths at 30-year high

Road design, better enforcement of safety norms can limit fatalities

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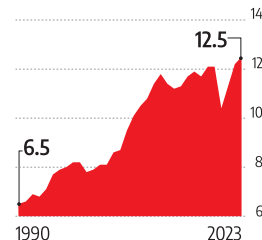
Union Transport Minister Nitin Gadkari has underlined the need to reduce road fatalities. The call comes at a time when India is losing more people in road accidents each year, relative to its population, than at any point since at least 1990, shows an analysis of government data for the past three decades.

There were 12.5 deaths per 100,000 population in 2023, according to the transport ministry's Road Accidents in India 2023 report released in August. This is the highest level in the data available since 1990, compiled from earlier editions of the report.

Speaking at the Indian Roads Congress in Bhubaneswar, Odisha, on November 7, Gadkari stressed the need for better road engineering and safety measures to curb accidents, which claim more than 400 lives every day.

On the rise

Number of persons killed per 100,000 population



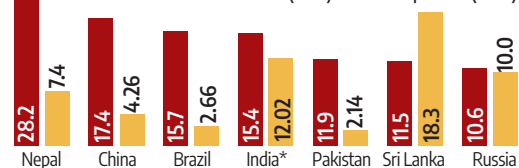
Source: Road Accidents in India reports

Experts point to several reasons for this rise. Sanjay K Singh, professor at the Indian Institute of Management (IIM) Lucknow, said: "India's mixed traffic conditions, where motorised and non-motorised vehicles share the same roads without proper segregation, exacerbate accident vulnerability,

Middle of the pack

Fatality rate per 100,000 population

■ WHO estimates (2021) ■ IRF compilation (2023)



*2023 data for India was separately calculated by *Business Standard*. The International Road Federation (IRF) data relies on official sources of statistics such as transport ministries, subject to verification and validation. The World Health Organization (WHO) numbers also includes multiple inputs such as national health data in their estimates. Differences in population estimates used can affect the final figure. Sources: IRF World Road Statistics, Road Accidents in India-2023, *Business Standard* calculations, WHO

especially for pedestrians and cyclists. The situation is compounded by weak enforcement of traffic regulations related to speed limits, drunk driving and overloading, as well as inadequate trauma care and emergency medical systems that reduce survival chances after a crash."

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Singh added that road infrastructure and design that do not sufficiently prioritise safety also contribute to the rising trend.

The number of deaths relative to population was stable, or even declined at times, in the years before the pandemic — for instance, it was lower in 2017 than in 2011. It edged up before falling during the restrictions imposed to control Covid-19. But this temporary reprieve was followed by a new high in 2022, and an even higher level in 2023.

WHO estimates suggest that India's road-death numbers might be higher than official records indicate. A similar gap exists for other emerging-market countries and South Asian neighbours. Nepal, China and Brazil show lower figures based on International Road Federation (IRF)

data, which, in India's case, relies on transport ministry numbers. WHO notes that its estimates also draw on other sources like national health data. On this basis, WHO data places India in a better position than the three countries mentioned above. However, the WHO estimate for India — 15.4 deaths per 100,000 population — is still higher than the official ministry figure.

“...for 43 per cent of the countries, WHO estimates are 1.5 times greater, and for 26 per cent, more than 3 times greater than the official rates reported by those countries,” notes the *Road Safety in India: Status Report 2023*, authored by Geetam Tiwari, Rahul Goel and Kavi Bhalla of the Transportation Research and Injury Prevention Centre at IIT Delhi.

Another researcher pointed out that two-wheelers account for 75 per cent of

India's vehicles. Their riders are more at risk of serious injury or death in the event of a crash. While better road design and vehicle safety features like airbags can help, even more basic steps can significantly reduce fatalities. For instance, the enforcement of helmet use varies widely between Indian states, the researcher said.

Traffic segregation through dedicated lanes for two-wheelers, cyclists and pedestrians can help reduce fatalities and promote public transport by discouraging excessive private vehicle use, according to Singh.

He added that strict enforcement of laws on drunk driving, helmets and seat belts, fatigue-management measures, and pay structures that reward safe behaviour for commercial drivers are crucial. Equally important, according to him, are enforcing truck overloading norms, regular safety inspections for commercial vehicles, tighter vehicle safety standards and improved road design.