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BUCKLED UP?

*An assessment of helmet and seatbelt law compliance in
Chennai*



Retteri Junction in North Chennai

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Background

Globally, India contributes around 11 per cent of road crash fatalities. This translates to 17 lives being lost every hour on Indian roads. Within the country, Tamil Nadu has had the dubious distinction of being in the top two states in terms of number of road crashes and road fatalities for several years. Since 2017, concerted action by state government agencies has started to reverse this trend.

In 2019, 30 per cent of deaths in India were due to two-wheeler riders and pillions not wearing a helmet and 14 per cent of deaths were due to non-compliance with the seatbelt rule. Considering two-wheelers accounted for the highest percentage of deaths at 37 per cent, enforcement of the helmet rule should reduce fatalities and serious injuries considerably.

According to the [Road Accidents in India 2019 report](#) from the Ministry of Road Transport & Highways, in 2019, when compared to 2018, fatalities due to helmet non-compliance had gone up by 2.6 per cent while fatalities due to seatbelt non-compliance had reduced by 14.5 per cent in India. Tamil Nadu has contributed substantially to the poor helmet compliance number. Overall in helmet non-compliance, Tamil Nadu ranked 3rd behind Uttar Pradesh and Maharashtra. In terms of seatbelt non-compliance, Tamil Nadu ranked 4th.

Impact of non-compliance with helmet and seatbelt rules in Tamil Nadu

YEAR	DRIVER		PILLION RIDER	
	KILLED	INJURED	KILLED	INJURED
2019	3362	17787	785	5633
2018	3956	20378	1092	6160
2017	4620	17320	1485	8658

YEAR	DRIVER		PASSENGER	
	KILLED	INJURED	KILLED	INJURED
2019	722	4938	429	3655
2018	839	5067	775	4988
2017	1948	10926	1951	10727

Data source: Road Accidents in India 2017, 2018, 2019 (Ministry of Road Transport and Highways)

Helmet and seatbelt compliance, or rather non-compliance, has been a discussion point in the state with several public interest litigations filed in the Madras High Court and Court repeatedly passing orders that the law be strictly enforced. As per Section 129 of the Motor Vehicles Act, 1988, only two people are allowed on a two-wheeler and both must wear a helmet. Section 177 notes that the penalty for violation is Rs 100 for a first offence and upto Rs 300 for subsequent offences. However, tracking multiple-time offenders has not been in

place so typically Rs 100 would be the fine charged each time, if an offender was caught. Over the years, enforcement levels have varied in Tamil Nadu.



In 2019, with the passage of the Motor Vehicles Amendment Act (MVAA), a hike in penalties for such violations was anticipated and this, it was hoped, would act as a deterrent. The Government of India issued a notification bringing the new penalties into force from 01, September, 2019. This notification ([S.O 3110 \(E\)](#)) increased the penalty for not wearing a helmet to Rs 1000 and having the driving licence being disqualified for 3 months. For a brief while, there was a [visible increase in helmet compliance](#) in Chennai at least. However, the notification was not adopted by Tamil Nadu and the old fines continue to be levied.

In terms of seatbelt, the Motor Vehicles Act, 1988, imposes the same penalties as for helmet non-compliance i.e Rs 100 for the first offence and upto Rs 300 for subsequent offences. The level of enforcement, similarly, has been varied. In recent years, in Tamil Nadu, there has been some effort to enforce the seat belt rule with regards to car drivers largely and partially with regards to front seat passengers. However, the Central Motor Vehicle Rules, 1989 were amended in 1999 to also cover front facing rear seat passengers. But this has not been enforced in Tamil Nadu.

Tamil Nadu, since 2017, has been focussing on bringing road crash deaths through various measures such as better coordination between agencies and streamlining of emergency response systems. This has borne fruit with the state reporting a [reduction of 24 per cent in fatalities](#) between 2017 and 2018. This in spite of not aiming for low hanging fruit such as implementation of the helmet and seatbelt rules.

Keeping this in mind, in February 2021, as part of the National Road Safety Month, CAG conducted a survey to assess the level of helmet and seatbelt compliance in Chennai city. This survey builds on a similar exercise conducted in 2017.

A perception survey of motorists was also carried out to evaluate their knowledge of the law with regards to helmet and seatbelt usage, and their opinion on ensuring greater compliance.

Methodology

Ten intersections that see relatively high volumes of traffic in the city were chosen. The locations were spread to ensure geographical distribution across the city and also to overlap with the locations surveyed in 2017. Four volunteers were stationed at each location – two on each side of the road. They observed and noted data for three hours in a day – morning peak hour, midday non- peak hour, and evening peak hour. On each half of the road, one volunteer tracked two-wheeler riders and pillion rider while the other collected data on car drivers and front seat passengers.

Rear seat passengers were not observed due to practical difficulties as well as the fact that the focus of awareness drives and enforcement efforts has been on the car driver and front seat passenger.

Locations surveyed are listed below. The first 8 were also surveyed in 2017 for rider/driver compliance. Two other locations were chosen to ensure greater geographical spread and also



because in one of them (Anna Nagar), in 2018-19, the city police had installed CCTV cameras with licence plate recognition software.

1. TTK Road, Teynampet
2. Gandhi Statue, Marina Beach
3. Kalmandabam, Royapuram
4. Retteri signal, Retteri
5. Spencer's, Mount Road
6. EA, Thousand Lights
7. Cancer Institute, Adyar
8. Tidel Park, OMR
9. Anna Nagar
10. Vijayanagar bus stand, Velachery

In addition, a perception survey of 539 two-wheeler riders and 501 car drivers was conducted to assess their knowledge of helmet and seatbelt rules and their opinion on ensuring greater compliance with these rules. The perception survey was administered via the open access app, Kobo Toolbox.





At Cancer Institute intersection, South Chennai



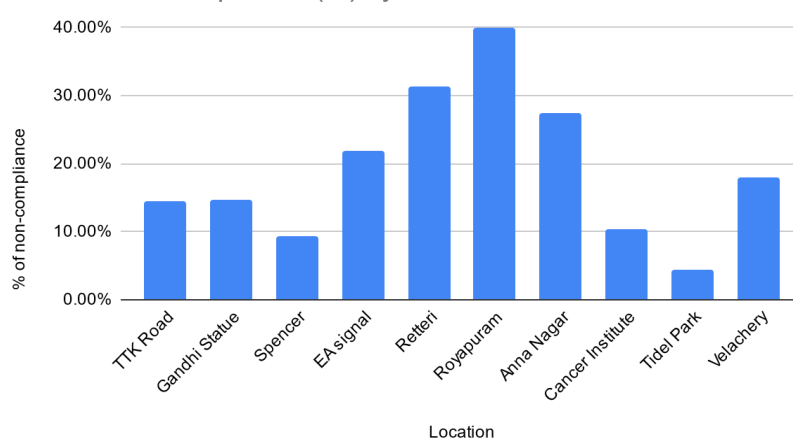
At Tidel Park junction, South Chennai



At Retteri junction, North Chennai

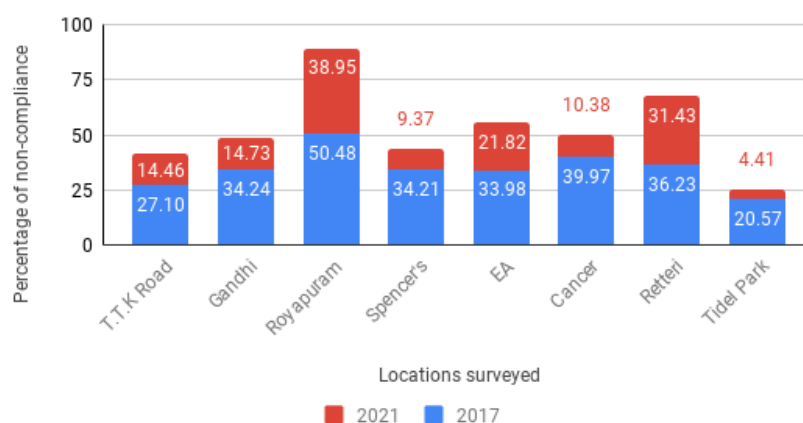
Results

Helmet non-compliance (%) by two-wheeler riders in 2021



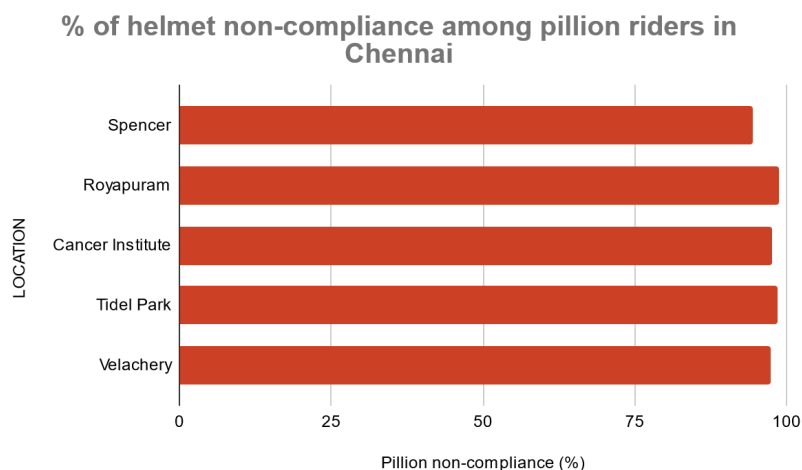
As seen in the graph above, helmet non-compliance in 2021 varied from intersection to intersection. Broadly, non-compliance was highest in North Chennai. Unexpectedly, Anna Nagar, where CCTV cameras were installed over 2 years ago, saw a fairly high level of non-compliance. Central and South Chennai turned out to be more law-abiding. Comparing this data with CAG's 2017 data, we found that overall there was an improvement in compliance levels. As the graph below illustrates, helmet compliance in the 8 locations that were surveyed in 2017 and 2021 showed improved compliance. In Royapuram (North Chennai), about half of the two-wheeler riders were *not* wearing helmets in 2017. This number reduced to around 39 per cent in 2021. Similar improvements could be seen across the 8 intersections.

% of helmet non-compliance among two-wheeler riders in Chennai

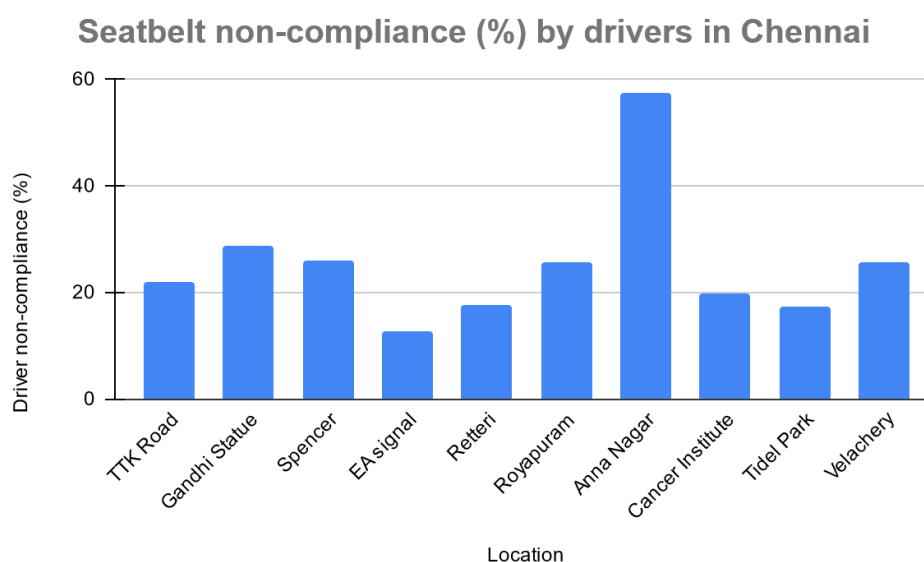


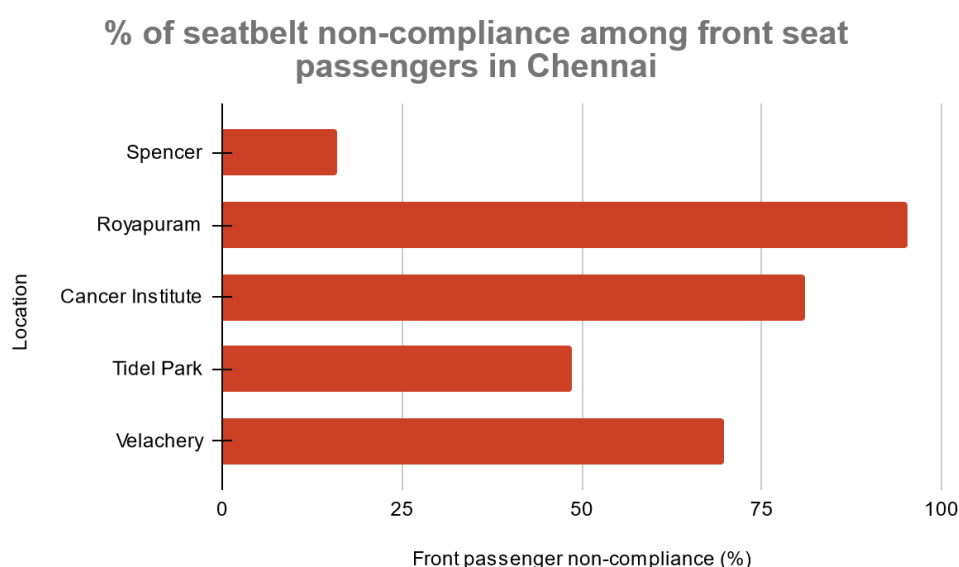
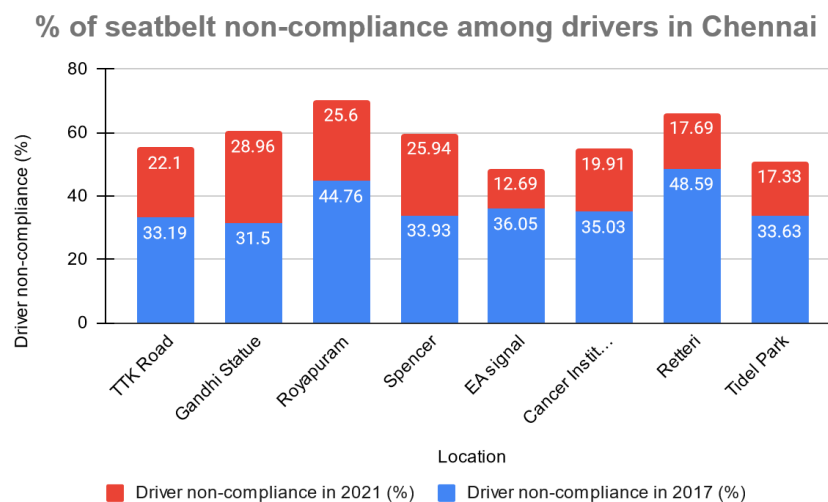
Since pillion rider compliance was not surveyed in 2017, we were unable to track the trend in pillion compliance with the helmet rule. The data for 2021 shows a very high level of non-compliance among pillion riders. This data was collected in 5 of the 10 locations but shows a very similar level of non-compliance.





The data for seatbelt compliance in cars shows a similar trend to helmet compliance with considerable improvement in driver compliance compared to 2017. Again, data was collected for front seat passenger only in 5 locations but, just like pillion riders, the level of non-compliance among front seat passengers is also consistently high. In addition, surveyors observed (though data was not recorded) that non-compliance among rear seat passengers was 100 per cent.





Perception Survey Results

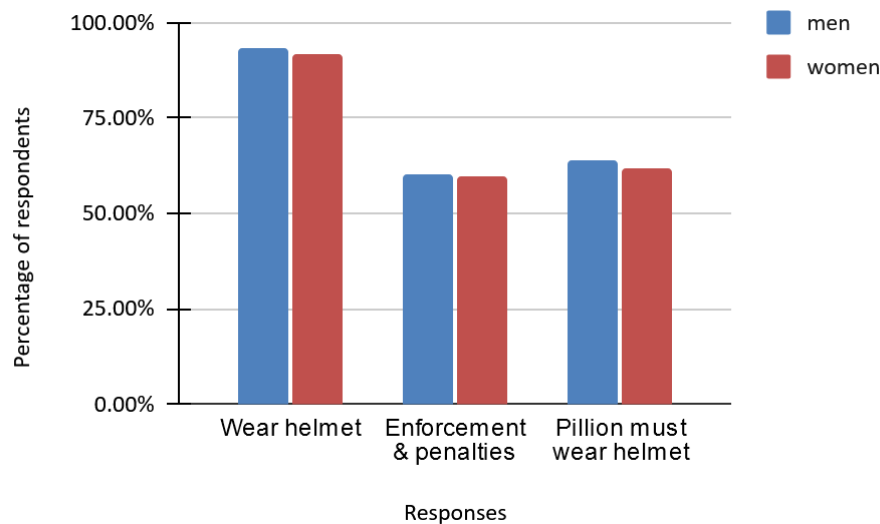
The Ministry of Road Transport & Highways (MoRTH) in its annual report, Road Accidents in India, looks at the data in the following demographic groups - below 18; 18 - 24; 25-34; 35- 44; 45- 59; and 60 plus. Hence the perception survey data has also been analysed as per these demographics.

Of the 539 two-wheeler user respondents, 250 were women and of the 501 car driver respondents, 250 were women. Reasons given for not wearing a helmet or seatbelt were similar across the groups - discomfort, feeling restricted, believing that they are safer riders/drivers and therefore do not need this, that they typically drive on smaller roads (the subtext being that these are roads safer, negating the need for helmets/seatbelts). Two wheeler riders in addition were concerned about how helmets messed their hair, purportedly causes hair fall, and is unfashionable.



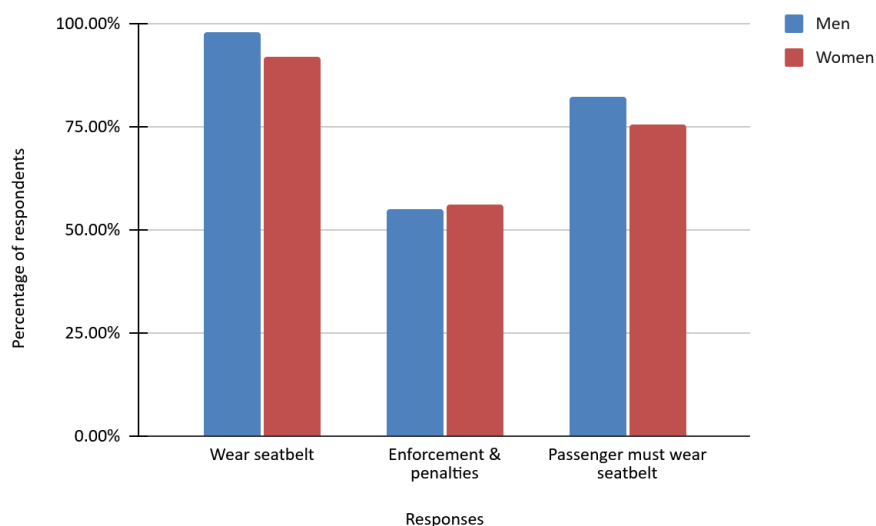
Two-wheeler users survey

Since there was only one interviewee below 18 years of age, that data point has been included with the 18-24 cohort. Of the 539 respondents, most claimed to wear helmets when riding a two-wheeler. When asked what would make them wear helmets, they responded that greater enforcement of rules and higher penalties combined would ensure better compliance. And finally, we were curious to know if they were aware that pillion riders are required to wear helmets. A majority of them responded yes.



Car drivers survey

A similar perception survey around seatbelt use among car drivers was conducted. Of the 501 respondents, most claimed to wear seatbelts. When asked what would make them wear seatbelts, they responded that greater enforcement of rules and higher penalties combined would ensure better compliance. We also asked if passengers are required to wear seatbelts and about 75 per cent of them responded yes.



Conclusion

Helmet compliance

Clearly at the eight signals which were surveyed both in 2017 and 2021, there is an improvement in rider compliance which is heartening. However, the level of non-compliance varies dramatically from 4 to 40 per cent. It would be interesting to understand why compliance is much better in places like Tidel Park and Spencer's compared to Retteri or Royapuram. Is there a difference in enforcement or visibility of police personnel or is there some other factor at play?

Seatbelt compliance

Like helmets, the seatbelt compliance among drivers has improved since 2017 though perhaps not as dramatically as with helmets. This could be due to sustained campaigns being done by the government and others the government has also been carrying out regular enforcement checks with regards to helmet and seatbelt compliance. Another contributing factor could be that in recent years the Supreme Court Committee on Road Safety has been actively monitoring the road safety progress of states, demanding regular reports and providing suggestions and inputs. The Madras High Court has also taken notice of road crash fatalities (public interest litigations had been filed by a doctor asking that the State step up and take action) and has repeatedly been demanding answers of the state government such as why existing laws on helmets and seatbelts are not being enforced. These potentially could have contributed to better enforcement, awareness, and compliance. At the same time, front seat passenger compliance is extremely low. Rear seat passenger compliance, as noted, was zero even though Section 138 (3) (amended vide GSR 214 (E) dated 18.03.99) requires the driver, front seat passenger, and front facing rear seat passengers to wear a seat belt. Perhaps this speaks to the fact that awareness and enforcement campaigns have focussed largely on the driver and not on passengers.



Anecdotal evidence in September 2019 showed an increase in compliance when the Government of India notified the increased penalties under the Motor Vehicles Amendment Act, 2019. Clearly, there is awareness of the rules and that, at least, temporarily the news of increased penalties had effect. However, this momentum was lost when the state did not adopt the notification. The perception survey found that a majority of respondents felt that stricter enforcement and higher penalties will result in greater compliance. So, there is public support for the idea. And certainly, as seen by the improved compliance in late 2019, albeit briefly, higher penalties do work as a deterrent to road rule violation.

Since 2017, Tamil Nadu has been upping its game with regards to road safety and the impact is showing in the reduced fatalities. Implementing higher penalties can contribute to this performance. Media reports note that cases booked for helmet rule violation had gone up by 91 per cent in 2019 (translating to 12,80,339 cases booked) compared to 2018¹. This was information shared by the Tamil Nadu Police to the Madras High Court.

A similar situation is seen with seatbelt compliance. Media reports indicate that of the 11.78 lakh cases booked in 2018 across Tamil Nadu for lack of use of seatbelts, Chennai's contribution was 1.04 lakhs. Of the 2068 deaths in 2018, 78 per cent was because of non-compliance with the seatbelt rule and nearly half of these deaths were of passengers. Tamil Nadu is second in seatbelt non compliance². Consider as well that of the 792 two-wheeler riders died in Chennai in 2018 and of them 98 percent were not wearing helmets³.

Clearly stronger enforcement combined with increased penalties as per the Motor Vehicles Amendment Act, 2019, would have a huge impact.

¹ [Helmet rule: Cases booked up by 91% this year, DGP tells Madras high court | Times of India](#)
[Public pay up helmet fine, 36 per cent cops don't | DT Next](#)

² [78 of people who died in car accidents didn't wear seatbelts | Times of India](#)

³ [Helmets could have saved 769 lives in Chennai last year: police data | New Indian Express](#)

