

Analysis of Road Accident Fatality in Malaysia: Body Part Injury

E. H. Sukadarin*, N. S. Suhaimi, H. A. Aziz, H. Osman, M. N. Noordin, I. Shafiee

Occupational Safety and Health Program, Faculty of Engineering Technology, Universiti
Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang, Pahang, Malaysia

*Corresponding authors: ezrin@ump.edu.my

ABSTRACT

Over the decade, the number of road crashes in Malaysia has kept increasing whilst the number of fatalities has not experienced any dramatic increase, hovering over 6,700 cases yearly. Speeding while driving, fatigue, and reckless driving are the causes of car accidents in Malaysia. The fatality rate of car accidents in this country is high as cars are a means of family transport. This becomes a challenge for this country to reduce the likelihood of road deaths and injuries due to reliance on these vehicles. Moreover, the causes of death in relation to bodily injuries are vaguely discussed. This hampers the vehicles safety programme initiatives meant to prevent accident fatalities. One of the established road safety programmes that highlights the above issue is ASEAN New Car Assessment Programme (NCAP) for verifying compliance with vehicle standards by implementing the NCAP star rating for Malaysian-produced cars. Accordingly, this study was commissioned to evaluate body regions that are the most vulnerable in frontal and/or side collisions. Results showed that head, neck, and chest are the most severely-affected body regions in frontal collisions. As for side collisions, chest is leading the overall results. In line with NCAP, all the above body regions are covered under Adult Occupant Protection (AOP) domain with three main assessments: Offset Frontal Test (OFT); Side Impact Test (SIT); and Head Protection Technology (HPT). Based on the findings, ASEAN NCAP star rating program could ensure manufacturing of safer cars, suitable to current needs.

Keywords: *Road Accident; Accident Fatality; New Car Assessment Programme (NCAP); Adult Occupant Protection (AOP)*