Abstract

Objective. To understand the critical factors that are likely to influence road traffic fatality rates in large cities around the world in the next few decades. Material and Methods. Road traffic fatality data for 56 cities around the world and for cities with a population of greater than 100,000 in the USA were collected and analysed to understand factors affecting differences in fatality rates. Results. There are wide variations in fatality rates across income levels and within similar incomes levels. The risk varies by a factor of about 20 between the best and the worst cities. Conclusions. These patterns appear to indicate that it is not enough to have the safest vehicle and road technology to ensure low road traffic fatality rates. City structure, modal share split, and exposure of motorists and pedestrians may have a significant role in determining fatality rates, in addition to enforcement, vehicle crashworthiness and road design.

Keywords

traffic safety; urban structure; sustainability