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Background Economic growth has been found to have a concave effect on road deaths. Road deaths increase at lower income levels, but decrease once has exceeded a threshold level. One would expect that, if the inverted U-shaped relationship for road deaths is valid, many road deaths would now be labelled as non-fatal road injuries at higher income levels.

Objectives The study's objective is to understand how economic growth affects non-fatal road injuries and what factors underlie this relationship.

Methods We apply a fixed effects negative binomial regression analysis on a panel dataset of 91 countries over the period 1963–2009. A number of variables that are related to the development of a country, such as improvements in medical services, democracy, political stability, vehicles per capita, the percentage of population live in urban areas, and adult alcohol consumption rate are included to account for this relationship.

Results Results indicate that there is an inverted U-shaped relationship between economic growth and non-fatal road injuries. The evidence presented in this study suggests that improvement in regulatory institution quality is accompanied by a lower number of non-fatal road injuries. On the other hand, improvements in medical care and technology, which have a reducing effect on road deaths, are associated with increases in non-fatal road injuries.

Significance Results indicate that policies focused on improving the quality of regulatory institutions should be implemented alongside other strategies that are designed to improve medical care and technology, in order to achieve a sustainable improvement in road safety.

04 **AN ASSESSMENT OF THE RELATIONSHIP BETWEEN NON-FATAL ROAD INJURIES AND ECONOMIC GROWTH**

doi:10.1136/injuryprev-2012-040580a.4