

Evaluation of the Effect of the Implemented Full-Width Frontal Impact Standard on Reduction of Fatalities in Japan

(2003 statistics by Ministry of Land, Infrastructure, Transport and Tourism)

Effect of the Standardization (2003): 1,076 deaths prevented

Calculation Method:

The number of deaths for the case where the full-width frontal impact standard is assumed not to have been implemented is calculated, and the difference between that assumed number of deaths and the actual number of deaths is determined and taken as the effect.

- The fatality rate for nonconforming vehicles involved in the target accidents is calculated.
Fatality rate: Number of deaths/Total number of occupants
Target accidents: Vehicle-to-vehicle accidents with four-wheeled vehicles or single vehicle accidents, where the crash takes place at the frontal or oblique frontal area.
- The number of deaths for the case where all the vehicles subject to the evaluation are assumed to be nonconforming vehicles is calculated.
Assumed number of deaths: Total number of occupants in the vehicles subject to the evaluation in each year between 1999 and 2003 × Fatality rate
- The effect (the number of deaths prevented) is calculated.
Number of deaths prevented: Assumed number of deaths – (Actual) number of deaths