



**National Traffic Safety and
Environment Laboratory**

Distribution of Leg Injury Occurrence in Pedestrian Accidents in Japan

**NTSEL
Shunsuke Takagi**

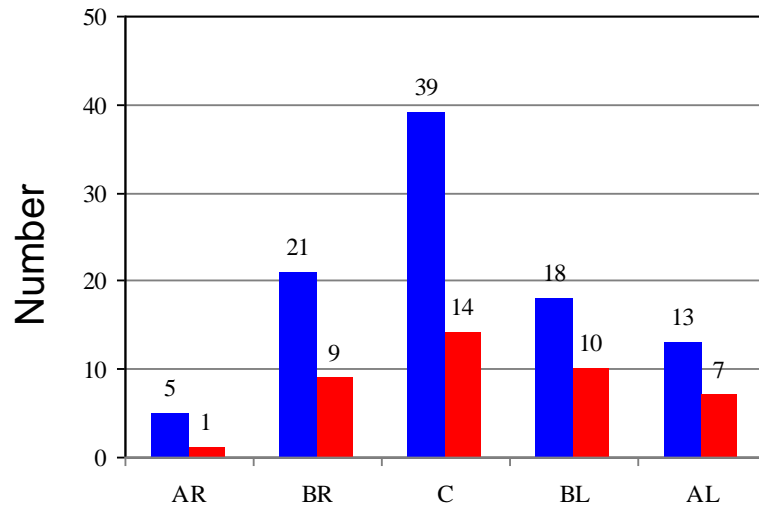


Conditions

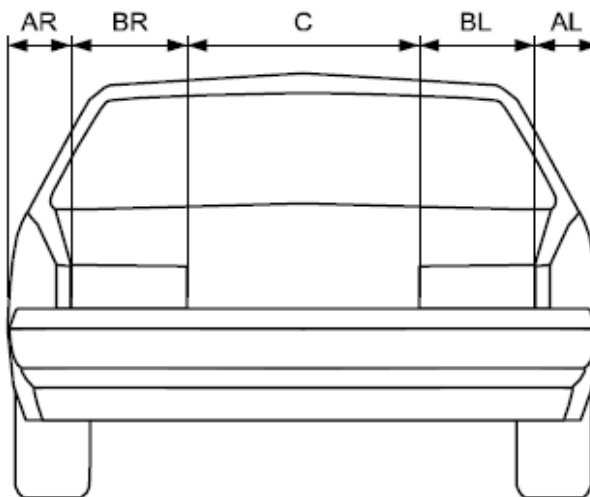
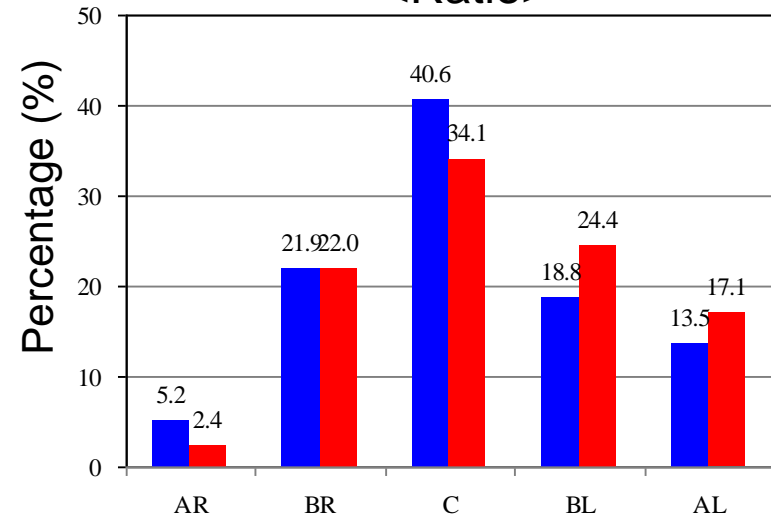
- Accidents involving four-wheeled vehicles and pedestrians
- Period: 1993 – 2003 (11 years)
- Cases: 96 (including AIS 2 and over: 41)
- Vehicle: bonnet-type
- Casualties: children over 16 in age and 150cm in height
- Excluding cases where pedestrian is run over by wheel
- Excluding cases of collision on vehicle lateral side


Distribution of Accidents (Leg Injury)


<Number>



<Ratio>



 AIS 1 and over

 AIS 2 and over

Note

- Installation position of vehicle light (AR, etc.) vary depending on the vehicle in which the accident occurred.
- Each location of accident is determined from photographs. Precise location is unknown.
- The general framework is summarized in this presentation.

Conclusion

- Leg injuries can be considered to occur in parts other than the central part of the bumper
- However, relationship with area outside the current bumper test area is unknown.

References

- Institute for Traffic Accident Research and Data Analysis
- Analysis Report on Vehicle Safety Measures Review through Accident Reproduction Experiment 2004