Pedestrian injuries and vehicle type in Maryland, 1995-1999.

Source
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Abstract
Pedestrian deaths constitute the second largest category of motor vehicle deaths in the US. The present study examined how pedestrian injury is associated with vehicle type, while controlling for vehicle weight and speed. Police, trauma registry, and autopsy data were linked for injured pedestrians. Logistic regression analyses were performed to control for vehicle weight and speed. Outcomes included pedestrian mortality, injury severity score, and injuries to specific body regions. Compared to conventional cars, pedestrians hit by sport utility vehicles and pick-up trucks were more likely to have higher injury severity scores (odds ratio=1.48; 95% confidence interval: 1.18-1.87) and to die (odds ratio=1.72; 95% confidence interval: 1.31-2.28). These relationships diminished when vehicle weight and speed were controlled for. At lower speeds, pedestrians struck by sport utility vehicles, pick-up trucks, and vans were approximately two times as likely to have traumatic brain, thoracic, and abdominal injuries; at higher speeds, there was no such association. The overall increased danger sport utility vehicles and pick-up trucks present to pedestrians may be explained by larger vehicle masses and faster speeds. At slower speeds being hit by sport utility vehicles, and pick-up trucks, and vans resulted in specific injuries, indicating that vehicle design may contribute to different injury patterns.

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