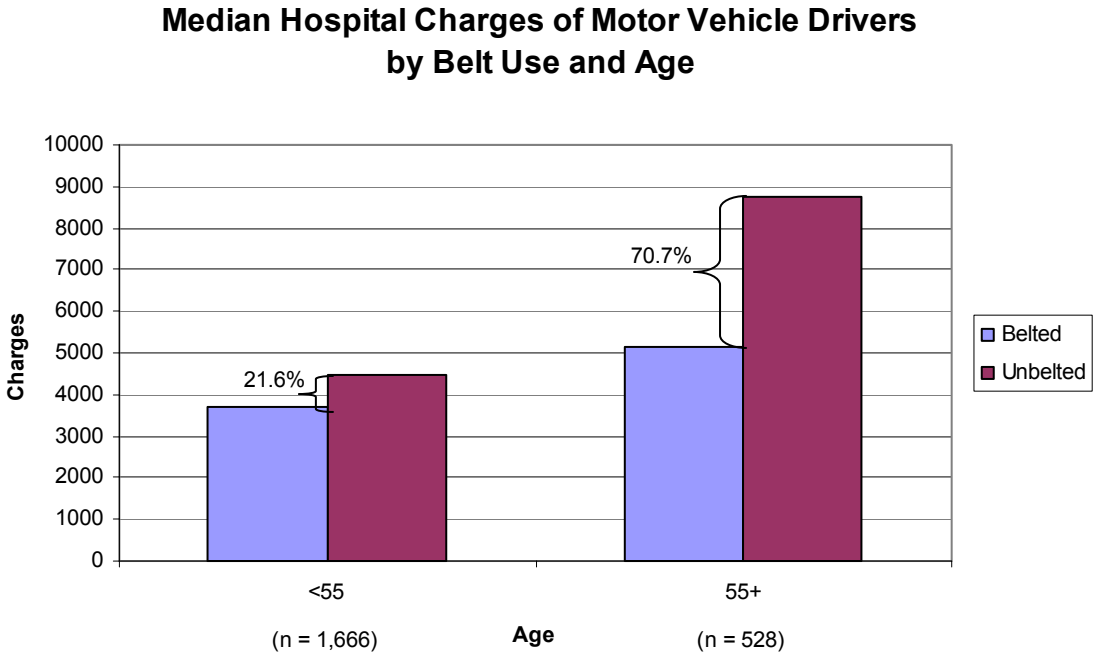
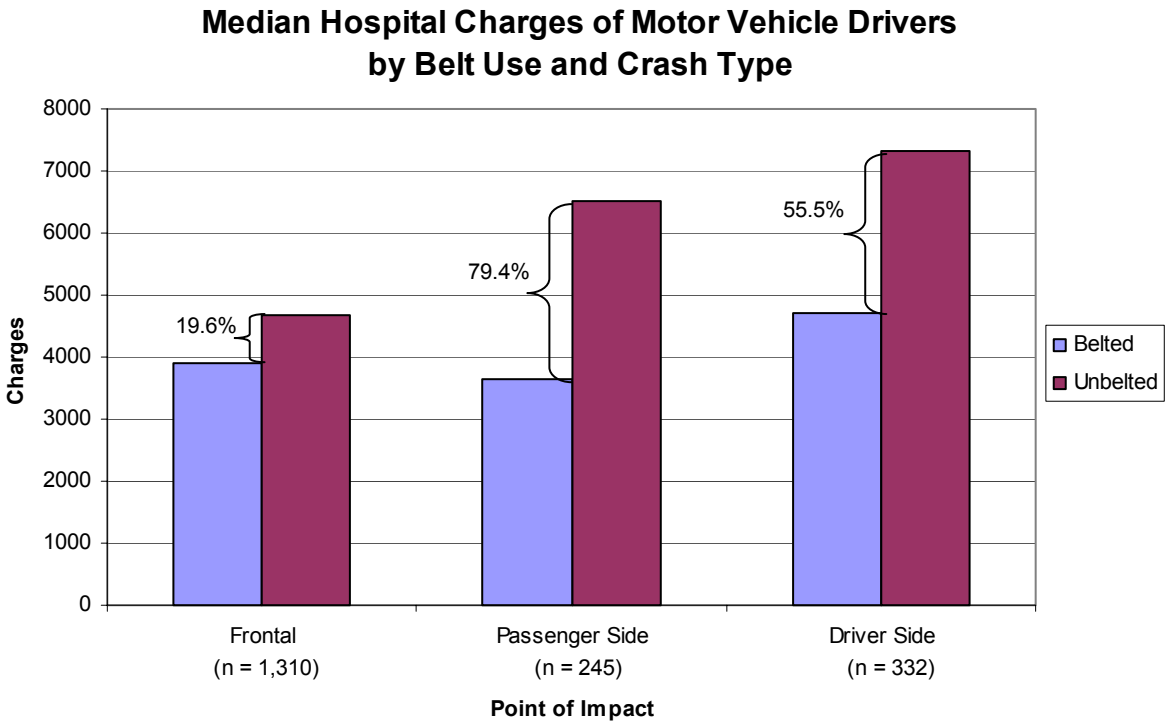
2001
Crash Outcome Data Evaluation System (CODES)

The National Study Center for Trauma and EMS is one of more than 25 sites currently funded by the National Highway Traffic Safety Administration (NHTSA) to conduct a statewide surveillance of injuries sustained in motor vehicle crashes as part of the Crash Outcome Data Evaluation System (CODES). Crash data from police reports and injury information from hospital records are linked using probabilistic linkage techniques refined by NHTSA. The charts and tables on the following pages are based on CODES data obtained on 2,618 drivers, excluding motorcyclists, who were discharged from Maryland hospitals in 2001 after involvement in a motor vehicle crash.

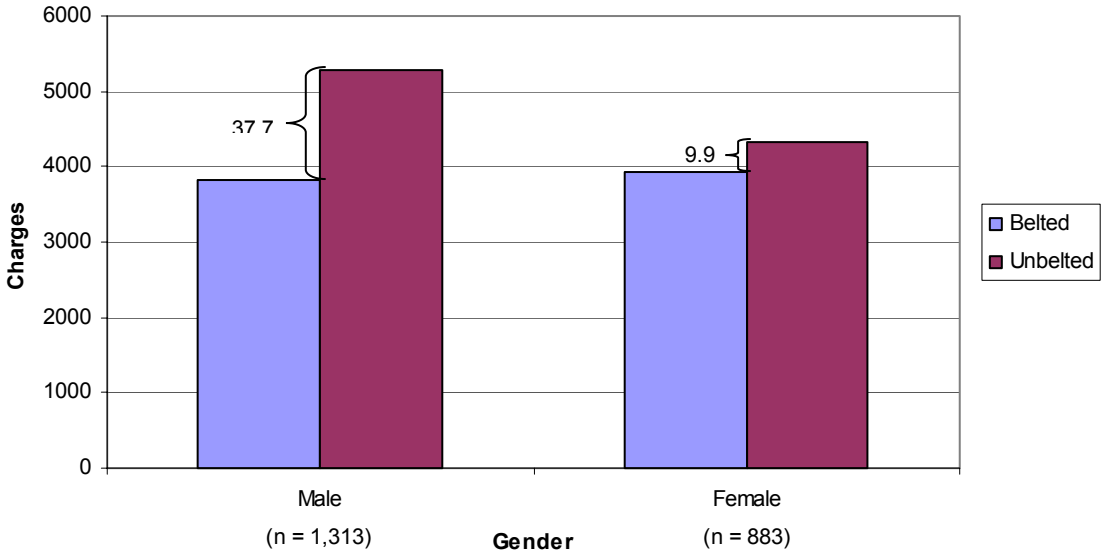


Unbelted drivers incurred higher hospital charges than belted drivers among young ($p<0.001$) and older ($p=0.005$) drivers. For older drivers, median hospital charges in the unbelted group were 71% higher than median charges for belted drivers. Overall, drivers younger than 55 years accrued the fewest hospital charges.

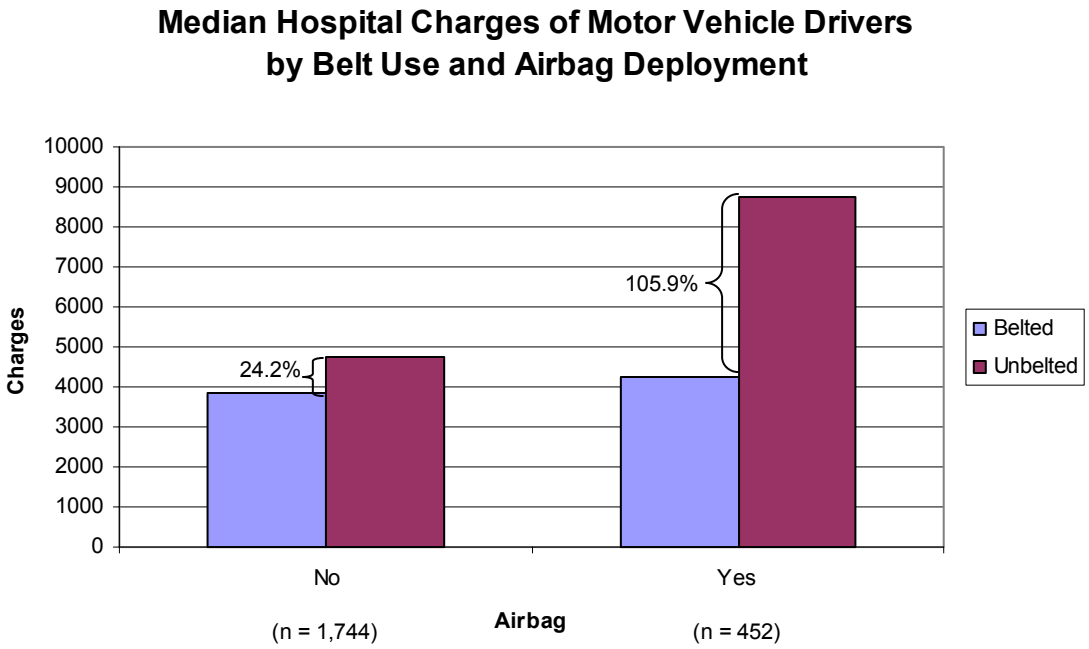


Unbelted drivers incurred higher hospital charges than belted drivers in both frontal ($p<0.001$) and lateral (passenger side, $p<0.001$, and driver side, $p=0.009$) crashes. Median hospital charges incurred in lateral crashes were more than 50% higher in the unbelted group as opposed to drivers who wore seatbelts.

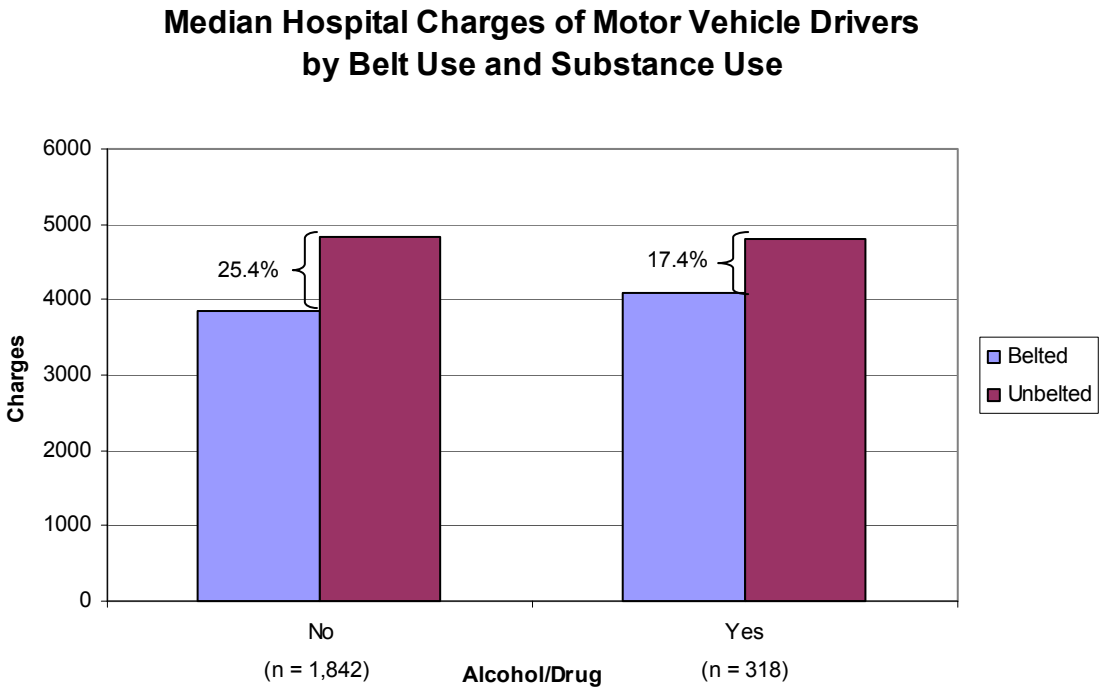
Median Hospital Charges of Motor Vehicle Drivers by Belt Use and Gender



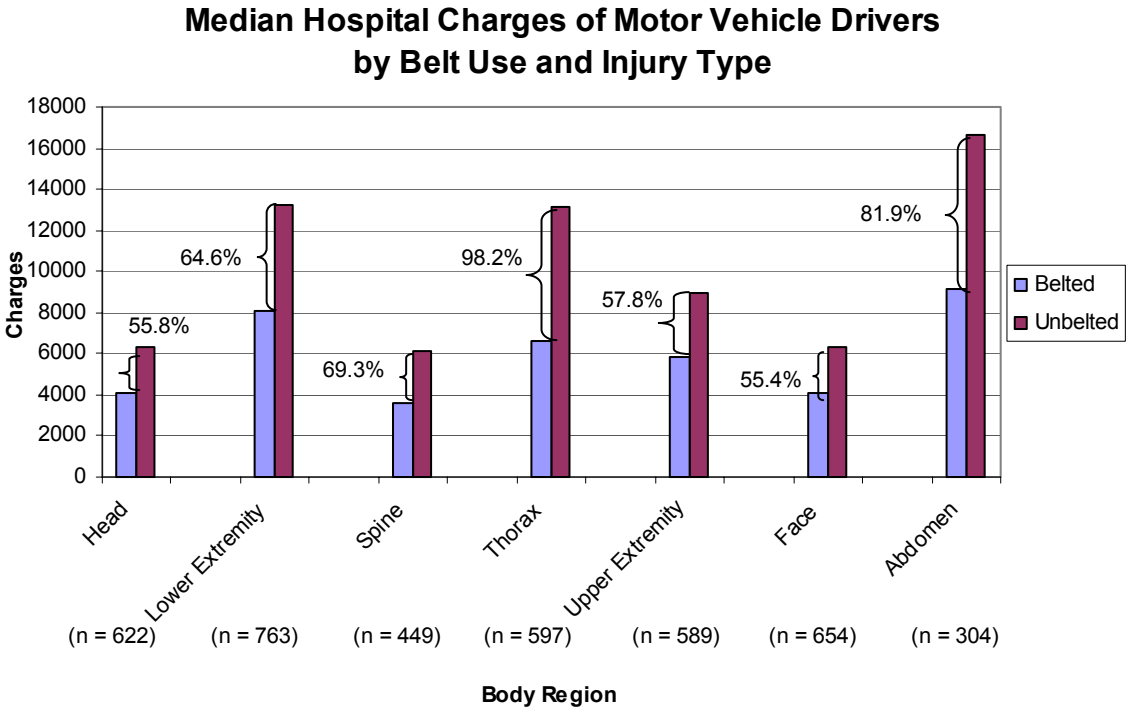
Unbelted male drivers sustained significantly higher hospital charges than male drivers who wore seatbelts ($p<0.001$). Although the difference in median hospital charges between belted and unbelted female drivers was not large, the overall distribution of charges accrued by unbelted females was still higher than that of belted women ($p=0.05$).



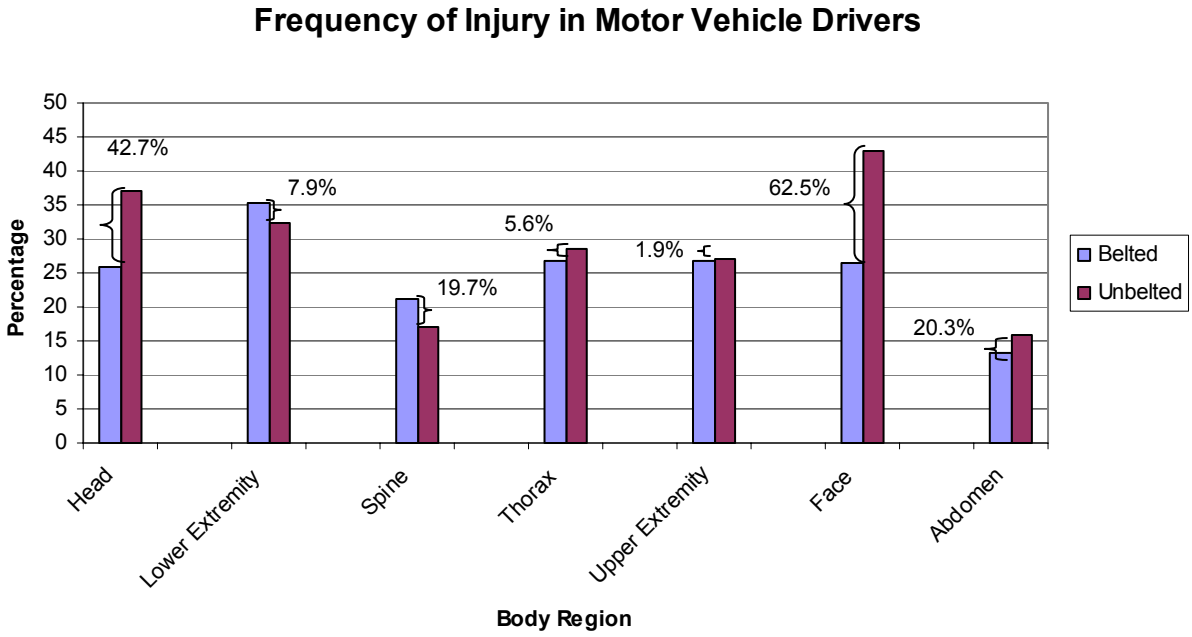
Drivers who wore seatbelts experienced significantly fewer hospital charges than unbelted drivers, regardless of airbag deployment. Among drivers whose airbag did deploy, median hospital charges incurred by those who did not wear a seatbelt were more than double the charges incurred by seatbelt users.



Alcohol and/or drug use did not affect the pattern of hospital charges accrued by belted and unbelted drivers. Regardless of substance use, the median hospital charge among unbelted drivers was $4800, approximately 20% higher than charges incurred by corresponding drivers who wore a seatbelt.



The amount of hospital charges incurred by unbelted drivers was higher than those sustained by belted drivers within every injured body region. The largest differences calculated between drivers who did and did not wear a seatbelt were found among those who suffered injuries to the abdomen and thorax, followed by injuries to the spine and extremities, and finally injuries to the head and face.



Drivers who did not wear a seatbelt were more likely to experience injuries to the face and head than were belted drivers. Spinal injuries and injuries to the lower extremities were more frequent among belted drivers. Overall, the abdominal area sustained the fewest injuries.