

NHTSA Report: Newer Cars Appear to Significantly Reduce Gender Disparities in Crash Outcomes

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Disparities in fatality rates between men and women fell significantly starting with model year 2000 vehicles, as NHTSA strengthened Federal safety standards.

The National Highway Traffic Safety Administration today published a new report, "[Female Crash Fatality Risk Relative to Males for Similar Physical Impacts](#)," which updates a [2013 NHTSA study](#) examining female fatality risk relative to male fatality risk in crashes with similar physical impacts.

"Advancing equity, including across our transportation system, is one of the Biden-Harris Administration's top priorities," said Dr. Steven Cliff, NHTSA's Administrator. "While NHTSA's new report shows significant declines in differences in crash outcomes between women and men, there is more work required to eliminate any disparities that remain."

The new report finds the estimated difference in female fatality risk compared to male fatality risk is significantly reduced in newer vehicles, starting as early as model year 2000. The newer the vehicle, the smaller the disparity. The overall gap drops from 18% to 6.3% for 2010-2020 vehicles and to 2.9% for 2015-20 vehicles.

The declines are the direct result of NHTSA's actions adopting and strengthening Federal Motor Vehicle Safety Standards for seat belts and air bags and launching educational campaigns to improve seat belt use. The study found, for example, that fewer than a third of occupants wore seat belts in the crashes included in the study involving model year 1960-2009 vehicles. For later year vehicles – model years 2010-2020 – almost 83% of occupants wore seat belts.

Some additional key findings of the study include:

- The estimated difference in fatality risk estimates for female versus male front row occupants is 6.3% (± 5.4) for model year 2010-2020 vehicles, which is significantly reduced compared to 18.3% (± 1.2) for model year 1960-2009 vehicles. The estimated difference is further reduced to 2.9% (± 9.8) for the latest model year vehicles (2015-2020).
- Newer generations of cars equipped with dual air bags reduce the estimated fatality risk for women compared to men.
- When passenger and drivers use the most advanced seat belts, also found in newer vehicles, the estimated fatality risk for women relative to men drops to 6.1% (± 4.2).

NHTSA is taking several steps to ensure that any existing disparities in like crash outcomes for men and women are eliminated. These include the development of new biofidelic crash test dummies, the development of sophisticated computer modeling that can evaluate the effects of different types of crashes on a large range of human body types and sizes, research into the degree to which sex disparities in injuries exist in like crashes, and the evaluation of new safety standards to eliminate all remaining disparities.

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