WASHINGTON Traffic Safety COMMISSION

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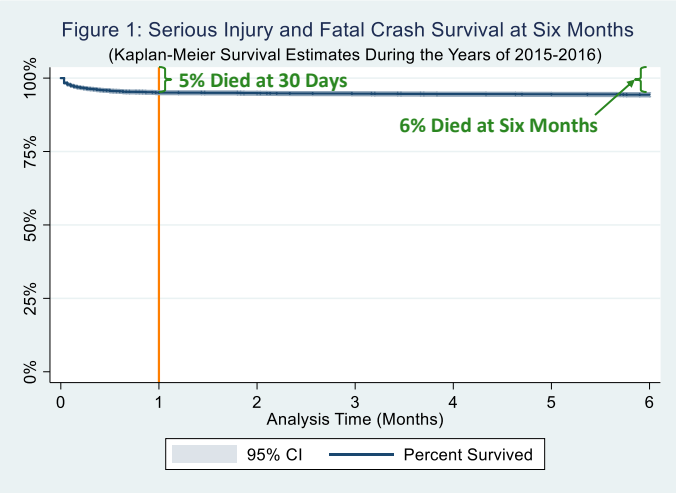
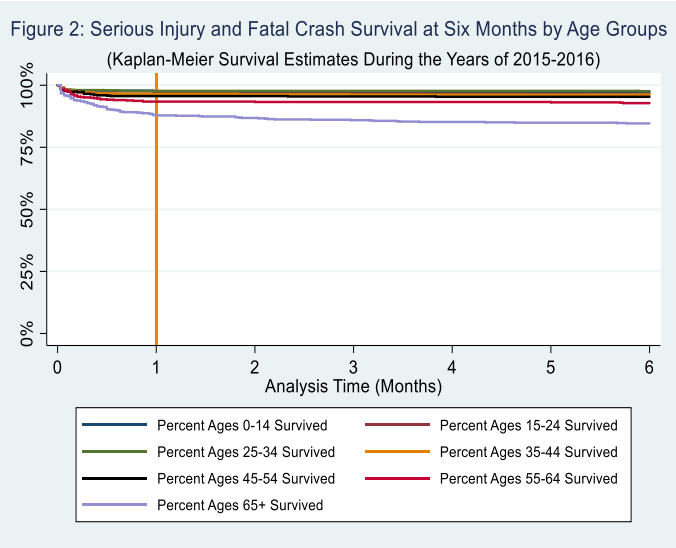
Post 30-Day Mortality of Crash Serious Injuries

Are there motor vehicle crash fatalities occurring outside of the post-crash thirty-day window captured by Washington's Fatality Analysis Reporting System (WA-FARS)?





Data Linkage: This question can only be answered by linking Washington Motor Vehicle Crash Data with the Washington Death Registry. Two years of crash data for the years of 2015-2016 are linked with three years of death data for the years of 2015-2017. An additional year of deaths data was necessary to ensure that every crash participant had at least six months or more post-crash follow up. The crash records and death records were matched using personal identifiers that exist in both datasets, i.e., date of birth, first name, last name, middle initial, and gender. As a result, 5,988 records were linked from both datasets, and post-crash deaths were flagged in the crash data with the date of death found in the death registry.

Data Analysis: The analysis is conducted on the linked person-level crash records identified as serious injuries or fatalities. The six month post-crash survival and fatality estimates are carried out using Kaplan-Meier (KM) Curves. The KM curves use information from those who died and those who survived to estimate the percentage of survivors or deaths at any point during the six month period. Additional drilldown analyses were also conducted by various crash and demographic factors.

Findings: For motor vehicle crashes involving serious or fatal injuries during the years of 2015-2016:

⇒ The overall fatality rate was about 5 percent at 30 days post-crash.

⇒ The fatality rate went up to six percent at six months post-crash. This rise in the fatality rate translated in to 35 additional deaths outside of the 30-day post-crash period captured in WA-FARS.

⇒ Age appears to be an important factor in predicting fatalities at 30 days as well as at six months.

- Most deaths occurred in the 65+ age group.
- In addition, the 65+ age group had 66% (23) of those 35 deaths that occurred outside of the 30-day window.

For more information, *please contact Washington Traffic Safety Commission, Research and Data Division at (360) 725-9860.*