

## Characteristics of the Severe Rollover Crashes in the UAE Using In-Depth Crash Investigation Data

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**Abstract :** Rollover crashes are complex events entailing interactions of driver, road, vehicle, and environmental factors. The primary objective of this paper is to present an empirical approach that can be used to characterise the rollover crashes and to identify some of the important factors that may lead to rollovers. Among the studied factors are the vehicle types and the rollover occurrence rate after hitting various barrier types. The carried analysis indicated that 71% of the rollover crashes occurred after impact and the type of rollover initiation is "trip/turn over" (nearly 50%). It was also found that light trucks (LTVs) vehicles are more likely to rollover than the sedan vehicles. Barrier impacts are associated with increased incidence of rollover.

**Keywords :** empirical, hitting barrier, in-depth crash investigation, rollover, severe crash

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