

ABSTRACT

Objective: While there is ample research in the teenage-driving safety literature indicating that teen passengers increase the risk of crash involvement, there is little research on teenage drivers' exposure to these known risk factors. Three research questions were assessed in this paper: 1) How many miles/% trips do novice teenagers drive overall and under risky conditions? (2) Does exposure to these risk factors vary over time?

Method: Forty-two newly licensed teenage drivers and at least one parent per teenaged driver were recruited at licensure and their personal vehicles were instrumented with highly capable data acquisition systems for 18 months. Data recorded included total miles driven and passenger presence.

Findings: Mileage for teenagers was highly variable with a maximum annual VMT of over 14,000 miles to a minimum annual VMT of less than 2000 miles across 18 months of driving. The mean of 6384 vehicle miles traveled (VMT) is similar to other reported average teenage mileage. Average VMT for teens increased only slightly over time. Teenagers drove 61% with no passengers present, 29% with one passenger present, and less than 10% of VMT with multiple passengers present. Driving alone also increased across months of driving whereas driving with passengers and multiple teen passengers remained constant.

Conclusions: These findings are among the first objective data documenting the nature of teenage driving exposure to known risk factors across the first 18 months of licensure. The higher level of exposure to passenger presence, especially in the early months of independent driving, and persistence over the first 18 months of driving suggests the potential safety benefit of greater exposure management among novice teenage drivers through licensure policy and parental involvement.