

# ` Quick Review of Model System Research

## A Return to Driving Following

## Moderate-to-Severe Traumatic Brain Injury

### What is the study about?

### This study’s aim was to describe who is able to return to driving (RTD) after moderate-to-severe traumatic brain injury (TBI), who maintains driving after RTD, and the association of RTD with TBI outcomes.

### What did the study find?

This study found that over a span of 30 years, three-quarters of people experiencing moderate-to-severe TBI return to driving a personal vehicle; however, not everyone maintains this activity. Employment, race, family income, and seizures are strongly associated with RTD. Driving was linked to greater community participation, better functional outcomes, fewer symptoms of depression, and greater life satisfaction.

### Who participated in the study?

Individuals who participated in the TBI Model Systems (TBIMS) program (N=618) and caregivers (N=88).

### How was the study conducted?

This study was a cross-sectional descriptive study. A survey was completed from 1-30 years post-injury focusing on RTD. Descriptors included demographic information (e.g., sex, gender), injury severity, and current employment status. Outcomes measured included depression, quality of life, functional status, and community participation.

### How can people use the results?

### Individuals with TBI and their families can use the results of this study to learn about how the ability to drive after a TBI may be associated with their wellbeing, including their mental health and life satisfaction. Practitioners can use the results of this study to figure out how to ensure timely access to driver assessment and training for all people, no matter their background. Practitioners also need to be aware of state guidelines regarding RTD following TBI.

### Reference

Novack, T. A., Zhang, Y., Kennedy, R. , Rapport, L. J., Watanabe, T. K., Monden, K. R., ...Niemeier, J. P. (2021). Return to driving following moderate-to-severe traumatic brain injury. *Archives of Physical Medicine and Rehabilitation, 102*(8):1568-1575. [https://pubmed.ncbi.nlm.nih.gov/33705772/]

**Disclaimer**

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