



Driving Following Traumatic Brain Injury: Clinical Recommendations – 2009

This fact sheet summarizes the clinical recommendations contained in the Driving Following Traumatic Brain Injury: Clinical Recommendations report that is a result of the DCoE Driving Evaluations after Traumatic Brain Injury Conference.

- **Goal: To ensure those who have sufficiently recovered from all severities of TBI have the opportunity to safely drive government and privately owned vehicles in accordance with federal and state guidelines.**
- Safe operation of a motor vehicle is a complex task requiring interaction of operational, cognitive, and higher executive functions and perceptual abilities.
- A traumatic brain injury (TBI) can disrupt the complex interplay of functions.
- Individuals with all severities of TBI may be at risk for developing symptoms that affect fitness to drive.
- A driving evaluation is a two-step process: Step 1) Driving screening and Step 2) Driving assessment.
- A driving screening should be considered for every individual with a TBI.
- A driving screening may be performed by any qualified clinician who has experience and knowledge to evaluate those domains listed on the back of this sheet.
- A comprehensive driving assessment is usually reserved for patients whose driving screening results raise concerns or based on clinical judgment, is warranted.
- A comprehensive driving assessment is performed by clinicians with driver rehabilitation training and education and TBI experience.
- The full report is available at: <http://www.dcoe.health.mil/ForHealthPros/Resources.aspx>

Mild TBI Symptoms that may affect Driving (not all-inclusive)

- Attention/concentration difficulties
- Memory difficulties
- Irritability
- Challenges with executive functioning
- Reasoning and problem solving
 - Organizing, planning and self-monitoring
 - Emotional regulation

Moderate and Severe TBI Symptoms that may affect Driving (not all-inclusive)

- Mild TBI symptoms in addition to...
- Visual impairment
- Paresis
- Plegia
- Post-traumatic seizures

Step 1: Driving Screening

Performed by any clinician with experience and knowledge to evaluate the following areas

- Visual acuity
- Visual fields
- Visual perception
- Visual processing
- Visuospatial skills
- Selective and divided attention
- Executive skills
- Fatigue
- Pain
- Coordination
- Motor and sensory function

A comprehensive driving assessment may be considered for those individuals whose driving screening results raise concerns or based on clinician judgment.

Step 2: Comprehensive Driving Assessment

Performed by clinician with driver rehabilitation training and education and TBI experience oftentimes referred to as a driver rehabilitation specialist

- **Medical and driving history**
 - Frequency of driving
 - Usual location of driving
 - Driving history pre and post injury
 - Self-reported violations/crashes
 - Verification of valid driver's license
- **Vision**
 - Visual field
 - Visual acuity
 - Contrast sensitivity
 - Depth perception
- **Motor**
 - Complex reaction time
 - Musculoskeletal screen
- **Cognitive**
 - Orientation
 - Visual perception
 - Constructional ability
 - Memory
 - Calculation skills
 - Reasoning and judgment
 - Visual attention
 - Visual scanning/search
 - Processing speed
 - Mental flexibility
 - Executive functioning
 - Directed attention
 - Sign recognition/road knowledge
- **Performance**
 - On-the-road
 - Simulation (if available)

What is a driver rehabilitation specialist?

A driver rehabilitation specialist is one who plans, develops, coordinates, and implements driving services for individuals with disabilities. Driver rehabilitation specialists are often occupational therapists, physical therapists, kinesiotherapists, psychologists and driver education specialists who undergo additional training in driver rehabilitation. While many driver rehabilitation specialists may hold a specific certification or are in the process of obtaining the necessary education and experience, certification is not required to practice driver rehabilitation.

Where are driver rehabilitation specialists located?

Several military treatment facilities, hospitals and clinics throughout the Department of Defense and the Department of Veterans Affairs have driver rehabilitation specialists on staff and may offer driver rehabilitation services. To determine if your facility offers these services or if your patient needs a referral outside of your facility, contact your rehabilitation services department.