

---

Using a Team Approach to  
Employment for People with  
Traumatic Brain Injury



---

---

---

---

---

---

---

---

***Sponsored by . . .***

---

- National Association of State Head Injury Administrators (NASHIA)
- U.S. Health Resources and Services Administration, Maternal and Child Health's Federal TBI Program



---

---

---

---

---

---

---

---

***In Cooperation with . . .***

---

- Council of State Administrators of Vocational Rehabilitation (CSAVR)
- Virginia Department of Rehabilitative Services



---

---

---

---

---

---

---

---

**Dave Hebda, Ph.D.**  
Clinical Neuropsychologist  
Manassas, VA

**Kimberly Graves**  
Field Manager, VA Department of Rehabilitative  
Services, Alexandria, VA

**Susan Rudolph**  
Case Manager, Brain Injury Services, Inc.  
Springfield, VA



---

---

---

---

---

---

---

---

**Sheli Sotiropoulos**  
Job Placement Specialist  
VA Department of Rehabilitative Services  
Fairfax, VA

**Carolyn Price**  
Employment Specialist  
St. John's Community Services  
Annandale, VA

**Shane Wise**  
Employee, U.S. Department  
of Transportation, Washington, D.C.



---

---

---

---

---

---

---

---

---

**David W. Hebda, Ph.D.**  
Clinical Neuropsychologist

**Overview of brain injury and  
neuropsychological assessment  
for vocational planning**

---

---

---

---

---

---

---

---

### **Disability Incidence**

---

- **TBI : 100 hospitalized cases per 100,000 population**
- **Cerebral Palsy: 10 per 100,000**
- **Spinal cord: 4 per 100,000**

---

---

---

---

---

---

---

---

### **Incidence of TBI**

---

- **500,000 to 3,000,000 per year in U.S.**
- **400,000 to 500,000 result in hospitalization or death**
- **The rest don't.....**

---

---

---

---

---

---

---

---

### **Peak Ages**

---

- **15-24 years of age (MOTOR VEHICLE CRASHES)**
- **0-5 years of age (falls)**
- **Over age 64 (falls)**

---

---

---

---

---

---

---

---

**Brain Stem: Life itself**

---

- Breathing
- Heart rate
- Blood pressure
- Swallowing

---

---

---

---

---

---

---

---

**Brain Stem: Life itself**

---

- Arousal and consciousness
- Sleep and wake cycles
- Attention and concentration
- Susceptible: to pressure, Coma, herniation, death

---

---

---

---

---

---

---

---

**Limbic System**

---

- Primitive structure, developmentally speaking
- Emotion
- Memory

---

---

---

---

---

---

---

---

### The Cortex

---

- Outer “bark” of brain
- Responsible for receiving sensory information and acting on it
- Inhibits limbic structures
- The “Intelligent” part of the brain

---

---

---

---

---

---

---

---

### Left Hemisphere Functions

---

- Right side of the body
- Expressive and receptive language
- Broca’s area, Wernicke’s area
- The “words” of language

---

---

---

---

---

---

---

---

### Left Hemisphere Functions

---

- Sequential, linear
- Details
- Analysis
- The trees
- Male brains asymmetrical

---

---

---

---

---

---

---

---

### **Right Hemisphere Functions**

---

- **Left side of the body**
- **Visual-spatial**
- **Synthesis**
- **Patterns**
- **Intuitive**
- **Insight**

---

---

---

---

---

---

---

---

### **Right Hemisphere Functions**

---

- **The “music” of language; prosody**
- **Non-verbal feedback**
- **Self-awareness?**

---

---

---

---

---

---

---

---

### **Right Hemisphere Functions**

---

- **Non-verbal problem-solving**
- **Women’s brains more symmetrical**
- **Role of corpus callosum, esp. in women**

---

---

---

---

---

---

---

---

- 
- **Occipital lobes: Vision**
  - **Parietal lobes: Sense of Touch**
  - **Temporal Lobes: Memory, hearing, understanding language**

---

---

---

---

---

---

---

---

### **Frontal Lobes**

---

- **Templates for all behavior**
- **Planning**
- **Initiation of purposeful activities**
- **Action systems**

---

---

---

---

---

---

---

---

### **Focal problems**

---

- **Parietal Lobe: Apraxia, inability to integrate senses, uses of objects**
- **Temporal Lobe: New learning (susceptible to oxygen deprivation, anoxia, alcoholism)**

---

---

---

---

---

---

---

---

### **Frontal Lobe Injury**

---

- **Stimulus-bound behaviors**
- **Impaired self-regulation**
- **Impaired emotional management**
- **Passivity**

---

---

---

---

---

---

---

---

### **Frontal Lobe Injury**

---

- **Lack of initiation**
- **Difficulty starting and stopping**
- **Inability to generate speech**
- **Inability to generate options to solve problems**

---

---

---

---

---

---

---

---

### **Diffuse injury**

---

- **Physical, cognitive, and emotional**
- **Somatic symptoms: Headache, dizziness, nausea, blurred vision, drowsiness, increased experience of pain**

---

---

---

---

---

---

---

---

**Diffuse Injury**

---

- Cognitive
- Emotional Deficits
- Psychosocial Deficits

---

---

---

---

---

---

---

---

**Routinely Screen for TBI**

---

- Was there a history of head trauma?
- Was there loss of consciousness? How long?

---

---

---

---

---

---

---

---

**Routinely Screen for TBI**

---

- Were there any lingering problems
  - headache
  - problems concentrating
  - problems with new learning
- Are there still problems?

---

---

---

---

---

---

---

---

**DSM-IV Cognitive Disorder NOS**

---

- **Postconcussional syndrome**
  - **History of head trauma**
  - **Evidence from NP testing to show problems with attention or memory**

---

---

---

---

---

---

---

---

**DSM-IV Cognitive Disorder NOS**

---

- **Three or more occur shortly after the trauma:**
  - **fatigue**
  - **disordered sleep**
  - **headache**
  - **vertigo or dizziness**

---

---

---

---

---

---

---

---

**DSM-IV Cognitive Disorder NOS**

---

- **irritability or aggression, anxiety**
- **depression**
- **affective lability, personality changes (inappropriateness)**
- **apathy**

---

---

---

---

---

---

---

---

**DSM-IV Cognitive Disorder NOS**

- Symptoms have onset after trauma
- Significant impairment
- Symptoms do not meet criteria for dementia

---

---

---

---

---

---

---

---

---

**The six most important things VR counselors need to know from a neuropsychological evaluation**

---

---

---

---

---

---

---

---

- 
1. Pre-injury history
  2. Level of intellectual functioning
  3. Hemispheric differences

---

---

---

---

---

---

---

---

---

**4. Memory skills, i.e., ability for new learning**

**5. Mental health / behavioral issues**

**6. Treatment recommendations:  
Insist on them!**

---

---

---

---

---

---

---

---

### **Compensatory Strategies**

---

- Day planners
- Alarm watches
- Written instructions
- Tape recorders

---

---

---

---

---

---

---

---

### **Compensatory Strategies**

---

- Accommodations
- Attention: Repetition
- Speed: Extra time
- Memory: Multiple modes

---

---

---

---

---

---

---

---

---

**Kimberly Graves**  
**Field Manager**

**VA Department of Rehabilitative  
Services**  
**Alexandria, VA**

---

---

---

---

---

---

---

---

**Vocational Rehabilitation**

---

**Helps people with  
disabilities get ready for,  
find, and keep a job**

---

---

---

---

---

---

---

---

**Eligibility**

---

- **Legally eligible to work in the United States**
- **Has a physical, mental, or emotional disability**
- **The disability has kept him/her from finding or keeping a job**

---

---

---

---

---

---

---

---

**Eligibility**

---

- **Social Security Disability (SSDI)**  
or
- **Supplemental Security Income (SSI); and**
- **Wants to work**

---

---

---

---

---

---

---

---

**VR Provides**

---

- **Assessments to determine eligibility**
- **Individualized Employment Plan (IEP)**
- **Vocational Education Testing**

---

---

---

---

---

---

---

---

**VR Provides**

---

- **Psychological Testing**
- **Job seeking skills**
- **Vocational Training**

---

---

---

---

---

---

---

---

**VR Provides**

---

- Placement
- Follow along

**Can provide**

- rehabilitation engineering
- assistive technology services

---

---

---

---

---

---

---

---

---

**Susan Rudolph, RN, CCM,  
CBIS, CRP  
Brain Injury Services, Inc.**

**Case Management and  
Support Teams**

---

---

---

---

---

---

---

---

**Support Teams**

---

- ✓ Case management
- ✓ Support teams address all life areas
- ✓ Variety of people on team
- ✓ Teams are fluid, members change as needed

---

---

---

---

---

---

---

---

**Case Manager: Team Facilitator**

---

- Schedule meetings, follow up on assigned tasks, etc.
- Facilitate communication  
-- regular meetings assure momentum
- Assist in identifying when team member is no longer needed, or new member should be included

---

---

---

---

---

---

---

---

**Members of Support Team**

---

- Person receiving services (leader of team)
- Family members / Significant others
- Vocational rehabilitation counselor

---

---

---

---

---

---

---

---

**Members of Support Team**

---

- Neuropsychologist
- Job developer / job coach
- Social worker
- Life skills trainer

---

---

---

---

---

---

---

---

**Other Members**

---

- Employer
- Therapist (PT, OT, SLP, cognitive, behavioral)
- Rehabilitation engineer
- Physician

---

---

---

---

---

---

---

---

**Case Manager: Team Facilitator**

---

- “Turns the wheel” of the team
- Offers advice and counsel on working effectively
- Supports other members of team
- Keeps record of team meetings
- Assures that there is a plan

---

---

---

---

---

---

---

---

---

**Sheli Sotiropoulos**  
**Job Placement Specialist**

**Brain Injury Services, Inc.**  
**Fairfax, VA**

---

---

---

---

---

---

---

---

---

**Carolyn Price**  
**Employment Specialist**  
**St. John's Community Services**  
**Annandale, VA**

---

---

---

---

---

---

---

---

**Job Coaching**

---

Job coaching is a service that provides support on a job site for people who live with a disability

Job coaching involves one-to-one assistance to help a person become skilled in all aspects of a job

---

---

---

---

---

---

---

---

**Building Trusting Relationships**

---

- **Consumer**
- **Family**
- **Friends**
- **Support team**

---

---

---

---

---

---

---

---

### **Job Coaching Strategies**

---

- Verbal cues
- Written instructions
- Assistive technology devices

---

---

---

---

---

---

---

---

### **Job Coaching Challenges**

---

- Unstructured training
- Maintaining focus
- Inappropriate responses

---

---

---

---

---

---

---

---

### **Natural Supports**

---

- Supervisor
- Co-workers
- Consumer
- Long-term follow-along

---

---

---

---

---

---

---

---

---

**Shane Wise**

**U.S. Department of Transportation**  
**Washington, D.C.**

---

---

---

---

---

---

---

---

**Thanks!**

---

This webcast is supported in part by project  
U 93 MC 00158 03  
Partnership for Information & Communication (PIC) Cooperative  
Agreement with the  
U.S. Department of Health and Human Services  
Health Resources and Services Administration  
Maternal and Child Health Bureau's  
Federal TBI Program



---

---

---

---

---

---

---

---

***For Resources Contact . . .***

---

**National Association of State Head  
Injury Administrators**

4330 East West Highway, Suite 301  
Bethesda, MD 20814

Phone: 301-656-3500  
[www.nashia.org](http://www.nashia.org)



---

---

---

---

---

---

---

---

*Technical Assistance provided by:*

---

**Center for the Advancement of  
Distance Education (CADE)**

**University of Illinois at Chicago  
(UIC)**

**School of Public Health (SPH)  
<http://www.uic.edu/sph/cade>**

---

---

---

---

---

---

---

---