The Impact of Disability, Vision & Aging and their Relationship to Driving

Course Description

This 2-day course provides a broad overview of the driver rehabilitation process. The course is designed for healthcare providers starting or advancing a driver rehabilitation program as well as those referring individuals to a program. Traffic safety/driver education professionals will benefit from the information that they can apply to their practice. Topics include: acquired, congenital, developmental and progressive disabilities; age-related and visual impairments that affect driving; the driver assessment process; adaptive driving equipment and vehicle modifications and driver licensing issues.

Goals/Objectives

By the end of this program, participants will be able to:

- Discuss the differences between acquired, congenital developmental and progressive types of disabilities;
- Analyze the effects of age-related changes, disabilities and visual impairments on driving;
- Discuss the driver assessment process and implications for driver assessment and training;
- Compare and contrast adaptive driving equipment and/or interventions and vehicle modifications;
- Assess and discuss solutions for driver licensing issues.

Outline

1. Disabilities and Driving
   a. Acquired Disabilities
   b. Progressive Disabilities
   c. Congenital and Developmental Disabilities
   d. Clinical and Behind the Wheel Assessments
   e. Equipment Considerations
   f. Considerations for License Restrictions

2. Vision and Driving
   a. Overview of Normal Visual Function
   b. Anatomy of the Eye
   c. Problems that Affect Vision
   d. Eye Diseases and Disorders Affecting Vision
   e. Clinical Assessment of Vision
   f. Visual Deficits and the Driving Evaluation
   g. Contraindications for Continued Driving
   h. Training and Remediation Techniques for Driving with Visual Deficits
   i. Glossary of Terms

3. The Older Driver
   a. Why are older drivers a separate population?
b. Driver statistics for the older driver
c. Age Related Physiological Changes
d. Self-Assessment Tools
e. Clinical Assessment of the Older Driver
f. Adaptive equipment options
g. Transportation of mobility Equipment
h. Behind the Wheel Assessment of the Older Driver
   i. Familiar Routes
   ii. Driving Skills
i. Alternative Transportation options
Course agenda

Day One

8:00 a.m. – 8:30 a.m.  Course Introduction

8:30 a.m. – 10:30 a.m.  Disabilities and driving—acquired disabilities
  o  Amputation
  o  Arthritis
  o  Stroke
  o  Spinal cord injury
  o  Traumatic brain injury

10:30 a.m. – 10:45 a.m.  Break

10:45 a.m. – 11:30 a.m.  Disabilities and driving—progressive disabilities
  o  Multiple sclerosis
  o  Amyotrophic lateral sclerosis
  o  Muscular dystrophy
  o  Parkinson’s disease
  o  Dementia

11:30 a.m. – 1:00 p.m.  Disabilities and driving—congenital or developmental disabilities
  o  Cerebral palsy
  o  Spina Bifida
  o  ADD/ADHD
  o  Autism Spectrum
  o  Learning Disabilities

1:00 p.m. – 2:00 p.m.  Lunch

2:00 p.m. – 3:00 p.m.  Overview of normal visual function
  o  Contrast and glare
  o  Ocular motor skills
  o  Color perception
  o  Visual fields
  o  Visual perceptual skills
  o  Visual information processing

3:00 p.m. – 3:15 p.m.  Break

3:15 p.m. – 4:00 p.m.  Anatomy of the eye
  o  Visual pathways
  o  Eye movement
  o  Cranial nerves

4:00 p.m. – 5:00 p.m.  Problems that affect vision
  o  Decrease in visual acuity
  o  Binocular vision disorders
  o  Loss of field of view
  o  Deficits in contrast sensitivity
  o  Deficits in glare recovery
  o  Problems in ocular motor performance
  o  Visual hallucinations
Day Two

8:00 a.m. – 9:30 a.m.  Eye diseases and disorders affecting vision
  o Glaucoma
  o Cataracts
  o Diabetic retinopathy
  o Retinitis pigmentosa
  o Macular degeneration
  o CVA
  o TBI
  o Various abnormalities

9:30 a.m. – 10:30 a.m.  Clinical assessment of vision
  o Vision screening
  o Stereoscopic vision testing
  o Ocular motor skills
  o Vision field testing
  o Visual perceptual skills testing
  o Visual deficits and the driving evaluation

10:30 a.m. – 10:45 a.m.  Break

10:45 a.m. – 12:00 p.m.  Training and remediation techniques for driving with visual deficits
  o Restorative strategies
  o Alternative strategies
  o Adaptive/compensatory strategies
  o Preventive strategies
  o Creative strategies

12:00 p.m. – 1:00 p.m.  Lunch

1:00 p.m. – 2:45 p.m.  Driver rehabilitation and the older driver
  o Why addressed as a separate population?
  o Community mobility
  o Driving statistics for the aging population
  o Aged-related physiological changes
  o Medical conditions affecting the aging population

2:45 p.m. – 3:00 p.m.  Break

3:00 p.m. – 4:00 p.m.  Driver rehabilitation and the older driver
  o Self-assessment tools
  o Clinical driving evaluation
  o Medical and driving history
  o Warning signs for a problematic driver

4:00 p.m. – 5:00 p.m.  Driver rehabilitation and the older driver
  o Adaptive equipment
  o Behind-the-wheel evaluation
  o Alternative transportation
  o Documentation
  o Resources

Closure and course evaluations
Type of Activity:
Live

Content Level:
Introductory

Course Audience:
OT

Content Focus:
Domain of OT – Areas of Occupation
Occupational Therapy Process - Evaluation

Keywords:
Community Mobility
Driving
Older driver
Vision and disability