# Screening and Management of Age and Medically-Related **Driving Impairments**

### presented by Linda Hill, MD, MPH

**Professor, School of Public Health School of Medicine** 





FOR DRIVING SAFETY

## **Disclosure Statement**



# Dr. Hill has no relevant financial relationships to disclose.



Cognitive assessment tools may be somewhat culturally specific to English speaking patients.

We will train in cognition by using the Trail Making Test and Clock Drawing Test, which have been shown to have less cultural bias than other cognitive assessment tools.





- 1. Understand the safety risks of older drivers
- 2. Identify conditions that may put patients at risk for unsafe driving
- 3. Name the clinical screens to evaluate patients' level of function for driving fitness
- 4. State referral and treatment options for patients who are no longer fit to drive
- 5. Demonstrate familiarity with California DMV reporting methods and requirements

# **California Facts**



### California has 4.8 million residents over age 65



107-year-old Edythe Kirchmaier was California's oldest driver

- 3.6 million are licensed drivers
  - 663,000+ ages 80 89
  - 101,000+ ages 90 99
  - 500+ over age 100
- By 2030, one in five licensed drivers will be over age 65

# Injury Ranking & Mortality (2017)

Age Group	Injury Ranking	Rates/100K
25-34	#1	56.6
35-44	#1	55.8
45-54	#3	57.7
55-64	#3	55.7
65-74	#6	50.7
75-84	#9	113.3

Other causes of death may rank higher than injury in older age groups, but the raw numbers remain impressive

# Motor Vehicle Deaths: 2017



Age Group	2009 Traffic Deaths	Trend
25-34	7024	UP
35-44	5324	UP
45-54	5660	UP
55-64	5828	UP
65-74	3823	UP
75-84	2836	UP

• Motor vehicle injuries: leading cause of injury-related death for those 65-74 years and the second for those 75-84 years

# **Older Adults and Driving**



### Older adults often outlive their driving abilities

- Men by 6 years
- Women by 10 years

### **Driving cessation resulted in:**

- Fewer trips to doctor
- 5 times more likely to be admitted into long term care, even controlling for marital status and co-habitation (Chihuri 2015)
- Increased mortality
- Decline in activity levels (Foley et al., 2002)
- Twice the risk of depression (Chihuri 2015)

# **Older Drivers in the News**

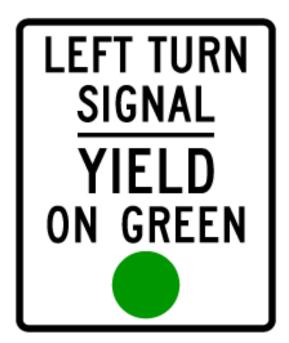


### **Recent Headlines**

- 100 year old backs car onto a sidewalk full of children
- 92-year-old man suspected in a fatal hit-and-run...he thought he hit an owl
- Five elderly women suffer cuts, broken bones in rollover
- 91-year-old backs over and kills 43-year-old Chamber of Commerce executive
- CHP officers spend 40 minutes pursuing an 87-year-old motorist driver did not notice the six squad cars and police helicopter following him the entire way

# **Common Driving Errors**

- Inadequate scanning of roadways
- Difficulty staying in same lane
- Difficulty making left turns and selecting correct lane when turning
- Inappropriate or delayed stopping
- Lane changes without signaling
- Pedal error
- Failure to yield or respond appropriately to road signs or signals





## **Tragic Consequences**





### What is it about aging and driving?

### **Problems related to age can include**

- Reduced vision
- Cognitive impairment
- Decreased strength
- Other medical conditions and medications can impair driving





# **Vision Changes with Aging**



### **Reduction in Visual Acuity**

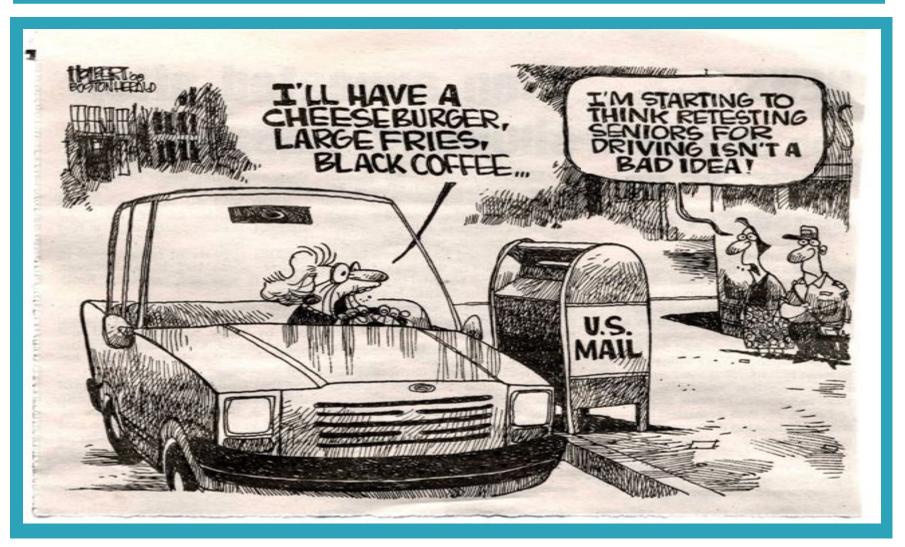
- Visual impairment between 65 and 69 is only 1.5%
- 24% of those over 80 years of age are visually impaired after their best correction attempt

### **Reduction in Visual Fields**

- Those with visual field loss in both eyes had crash rates two times higher than those with normal visual fields
- Nearly one in seven adults over 65 years of age displayed abnormal visual fields

## **Cognitive Impairment**





# **Cognitive Impairment**



# Cognitive impairment is often age-related and under-diagnosed

#### Prevalence rates rise significantly with age:

- 65 74 years: **2.4%**
- 75 84 years: **11%**
- Greater than 85 years: **34.5 50%**

### **Other studies report:**

- Up to 65% of dementia patients go undiagnosed by primary care physicians (Valcour, 2000)
- Nearly 25% of elderly patients without signs of cognitive impairment fail screens in primary care settings (McCarten et al., 2011)
- Outpatient testing protocols only had sensitivity of .4 (Borson 2006)

# **Reduced Strength & Frailty**

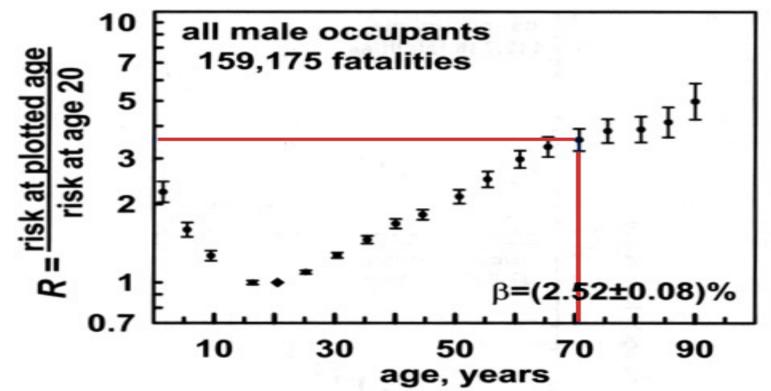


### Aging can affect strength and frailty due to

- Muscle mass reduction
- Increase in bone fragility
- Diseases such as arthritis
- Frailty increases crash risk
- Seniors are at risk for increased injury compared to younger drivers of similar accidents
- The passengers with older drivers also tend to be older adults; frail and at increased risk of injury or fatality

# **Fragility Data**





**Figure 6-8.** Average over all male occupants. Each point is the weighted average of the three values, one for each vehicle from Fig. 6-7.<sup>15</sup>

## **CA License Renewal Policy**



### Individuals 70 years of age and older

- Must renew license in-person
- License is renewed for *five* years if vision and written tests are passed and there are no signs of cognitive impairment
- A "limited term" license may be issued for one to two years if a medical problem exists but is not severe enough to stop driving (e.g. mild dementia)

# Medical Conditions and Driving <



### Driving is influenced by other medical conditions

- Cardiovascular
- Neurological
- Metabolic
- Musculoskeletal
- Respiratory
- Psychiatric
- Substance Abuse
- Other Conditions

   e.g. Hearing Loss, Cancer,
   Anesthesia and Post Surgery



# **Medications Affect Driving**

#### PRESCRIPTION DRUG ABUSE

# Various medications a cause problems for dr

- Anticonvulsants
- Antidepressants
- Antiemetics
- Antihistamines
- Anticholinergics
- Antihypertensives



#### Driving Under the Influence Avoiding the Effects of Drugs on Driving Perfo

#### by Linda L. Hill, MD, MPH

Acknowledgment s: Dr. Hill would like to acknowledge the contributions of Thu Truong and Tiep Ly, Phar mD candidates, Skaggs School of Pharmacy and Pharmacoutical Sciances, UC San Diego.

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PRESCRIPED HEDICATIONS, overthe-counter (VTC) medicatinus, and abused drugs, including alcohol, have the potential to interfere with the ability to drive safely. Physician have a responsibility to their patients and the public to minimize this risk in their prescripting practices, their patient counseling, and in reporting to the Department of Molor Vehicles.

The potential for impaired driving differs by age group; younger drivers are more likely to drive impaired due to abused drugs, while older adults are more likely to be taking prescribed medication, and engage



#### THE PROBLEM

Driving injuries are a major cause of disability and death. The use of certain medications increases the risk of these injuries, especially in older adults who are more likely to use prescription medications and engage in polypharmacy. Medications can affect vison and perception, decision making, reaction time and maneuvering – making it a challenge to safely operate a vehicle. Research tells us:

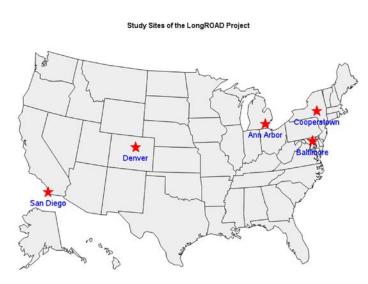
- 78% of drivers age 55 and older use at least one prescription medication with the potential to impair driving
- Two-thirds of people age 65 and older take five or more daily medications that can impair their safe driving ability
- 34% of seniors are prescribed medications by more than one clinician, possibly bypassing opportunities to check for interactions

#### GUIDELINES FOR CLINICIANS

- For seizures, psychosis and depression, the driving risks of the disease may be greater than the driving risks of the medications
- Counsel patients about the potential impact of medications on driving ability; take into consideration their condition and possible interactions with OTC drugs
- Advise patients to use alternative transportation if taking medications with side effects that can impair driving
- Comply with California's requirement to report lapses in consciousness associated with an underlying condition. A reduction in alertness due to medication side effects falls under this reporting requirement (CA HSC 103900)



# AAA Foundation LongROAD Study



- Purpose: To understand and meet the safety and mobility needs of the nation's growing population of older adult drivers.
- Prospective cohort
  - Age 65-79 at baseline
- Multisite
  - CA, CO, MI, NY, and MD
- In-vehicle data recording device
- Longitudinal
  - Baseline assessment
  - Annual follow up (in-person and phone)



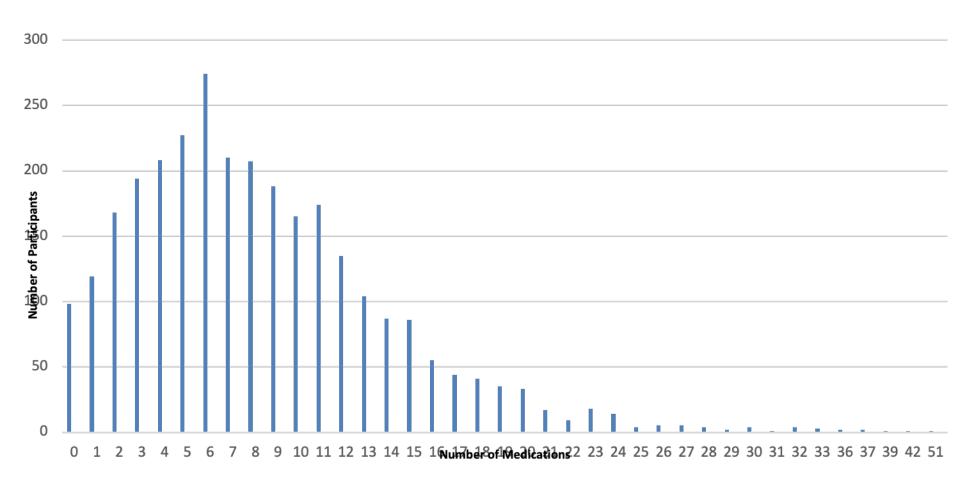
### Demographics

Demographic Category (N = 2,990)	%
Age group	
65-69 years	42%
70-75 years	35%
75-79 years	24%
Sex	
Men	47%
Women	53%
Race	
White, Non-Hispanic	88%
Black/African American	7%
Asian	3%
Education	
HS deg. or less	11%
Some college	18%
Associates/Bachelor's deg.	30%
Advanced college deg.	41%
Household income	
Less than \$20,000	5%
\$20,000 - \$49,999	21%
\$50,000 - \$79,999	24%
\$80,000 - \$99,999	14%
\$100,000 or greater	32%





### LongROAD: Number Participants by Number of Medications Used (N=2,949)





- Antihistamines continue to show a significant positive relationship to right/left turn ratio (p=.016).
- CNS agents are significantly related to greater speeding incidence (p=.004).
- Electrolytic agents are related to a reduced incidence of sudden deceleration (p<.001), whereas hormones and gastrointestinal agents are associated with an increase in sudden deceleration.

# **Alcohol Affects Driving**



### Alcohol has a profound effect on driving ability

- Results in 10,511 traffic fatalities in 2018 per NHTSA
- Involved in 30% of the 36,120 fatal crashes in 2019 (NHTSA);
- Older adults process alcohol at a slower rate, staying in the body longer



• Alcohol can intensify action/reaction of medications

# Alcohol Use in LongROAD Study



- 72.7% reported consuming alcohol,
- 15.0% reported high-risk drinking
- 3.3% reported DWI.

 High-risk drinking (OR = 12.01) and risky driving behaviors (OR = 13.34) were significantly associated with at least occasional DWI.

# **Strengths of Older Drivers**



### **General Characteristics of Older Drivers**

(Physically and Cognitively Intact)

- Take fewer risks
- More patient
- Possess greater life experience and knowledge of how actions impact others
- More compliant with the law

# **Self-Regulating Practices**

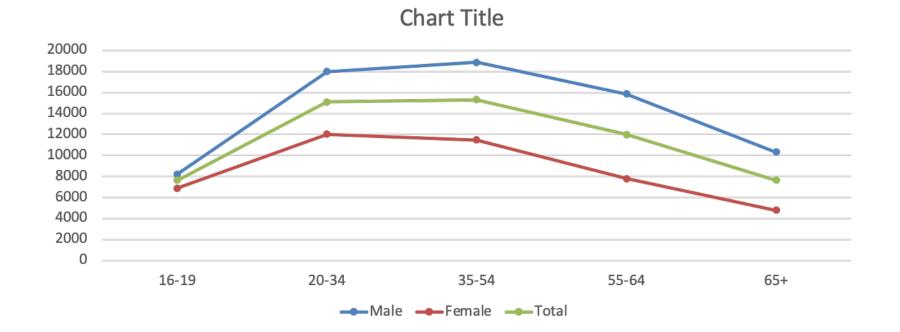
### Some older drivers self-regulate their driving

- Reducing driving exposure (e.g. fewer trips)
- Avoid certain driving conditions (e.g. bad weather, making left turns and times of heavy traffic)
- Women tend to self-regulate more than men (Kostyniuk & Molnar, 2008)



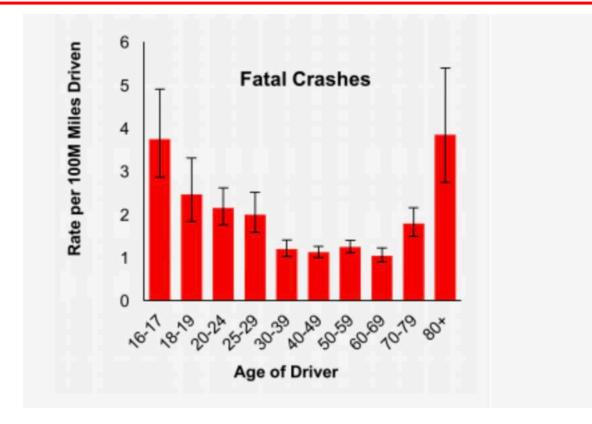








# Fatalities/miles driven by age



# **Clinician's Guide**



National Highway Traffic Safety Administration (NHTSA) and American Geriatrics Society (AGS)

"Clinician's Guide to Assessing and Counseling Older Drivers"

Quick screening and referral tool

CLINICIAN'S GUIDE TO Assessing and Counseling Older Drivers

4th Edition





# **Screening Tools**

### VISION: Conduct tests 1 and 2

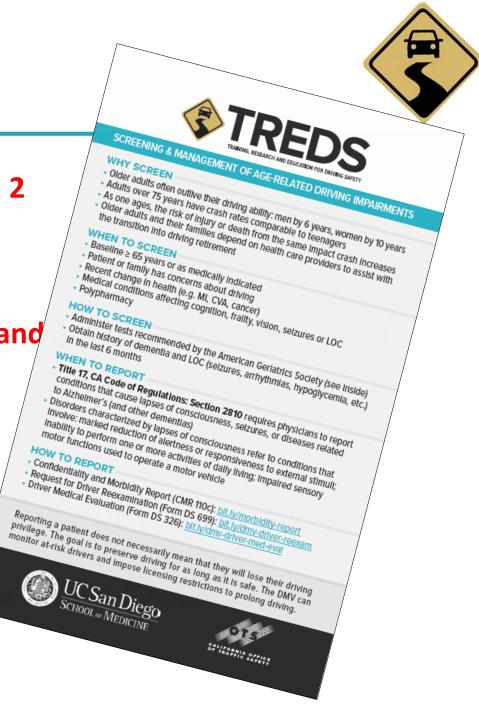
- 1. Visual Acuity
- 2. Visual Fields

### STRENGTH: Conduct test 1 and

- 1. Range of Motion
- 2. Rapid Pace Walk
- 3. Get Up and Go

### **COGNITION:** Conduct test

- 1. Maze Test
- 2. Montreal Cognitive A
- 3. Trail Making B
- 4. Clock Drawing



# **Pre-Screening Assessment**



# The following information can be useful prior to screening

- Review medical history/problem list
- Review medication list
- Review of systems
- Listen to patient or family concerns

# **VISION – Visual Acuity**



### **Testing for Visual Acuity**

- Use either the 10 foot Snellen chart or the 20 foot Sloan low vision letter chart
- Measure each eye separately and then both together
- Use glasses, if worn by the patient, to get best correctable vision



K.C. ALFRED

Ralph Larson, 95, takes an eye test while taking a driving test at the Hillcrest DMV on Tuesday.

# **Visual Acuity**



### Interpretation

- Corrected vision worse than 20/40 is abnormal and requires referral to a specialist
- Corrected vision worse than 20/70 requires an on-the-road assessment if the patient plans to continue driving
- Corrected vision worse than 20/100 requires the physician to advise the patient to stop driving, unless assessed and cleared by an on-the-road assessment

# VISION – Visual Fields



# Peripheral vision impaired by one or more visual conditions can result in

- Failure to react to a hazard coming from the driver's far left or far right
- Failure to heed to a stop light suspended over an intersection
- Weaving while negotiating a curve
- Driving too close to parked cars

### **Confrontational Testing**



#### If deficits are detected

- Refer to a specialist to rule out an underlying treatable disease
- If visual field deficits are not correctable, refer for on-the-road testing

### **STRENGTH – Range of Motion**



#### **Assess Range of Motion**

- Fingers: ask the patient to make a fist
- Neck: ask the patient to look over each shoulder
- Shoulder and Elbow: have the patient pretend to hold a steering wheel and make sharp right and left turns
- Ankle: ask the patient to point their toes and pull them back towards their body

### **STRENGTH – Rapid Pace Walk**



#### **Testing for Physical Strength and Balance**

- Tell the patient to stand on a piece of tape on the floor
- Point to another piece of tape 10 feet away
- Instruct the patient to walk to the other tape, turn around, and walk back
- Record the time it takes to complete this exercise



### STRENGTH – Get Up and Go



#### **Alternative test to Rapid Pace Walk**

- Tell the patient to sit in a straight-backed chair
- Rise from the chair
- Walk 10 feet and back
- Sit down again
- Observe patient's movement for slowness, staggering or abnormal movement



### Frailty and LongROAD

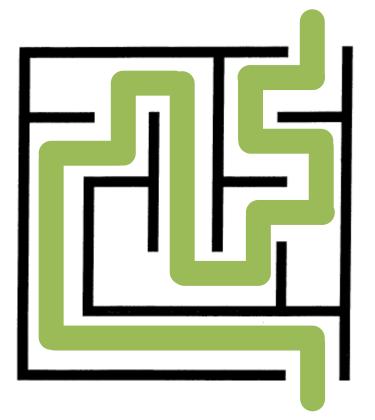


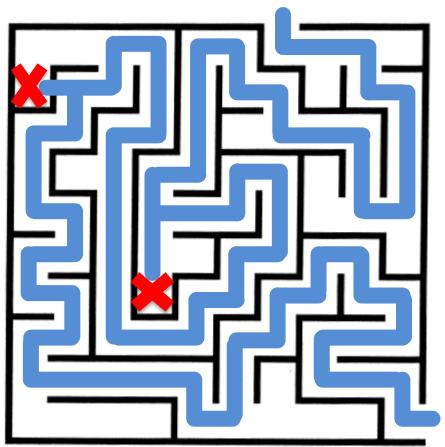
- Frailty definition: unintentional weight loss, weakness, exhaustion, slowness, and low physical activity
- Prevalence of Frailty: 56% prefrail (1-2 points), 3% frail (3-5 points)
- Frailty associated with reduced miles/year and driving cessation

### **COGNITION – Maze Test**



#### Practice Maze, then timed Maze Task



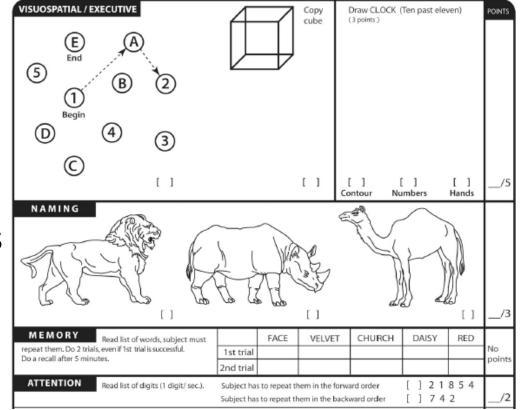


### **COGNITION – MoCA**



#### **Montreal Cognitive Assessment**

- Ten-minute test
- Measures eleven
   components
- Multiple languages available

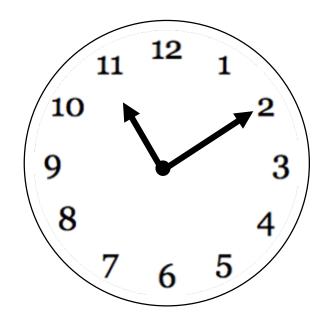


## **COGNITION – Clock Drawing**



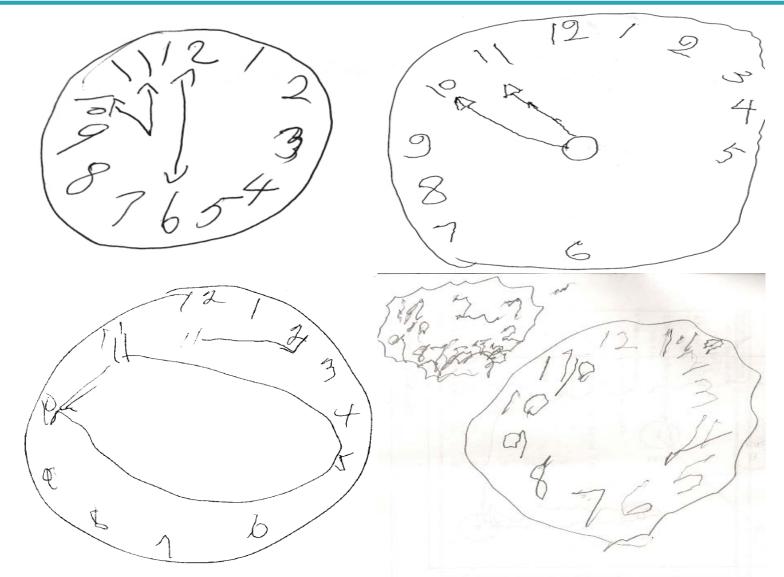
#### **Instruct the Patient to:**

- Draw a clock on a piece of paper
- Draw the face of the clock and put in all the numbers
- Set the clock to 10 minutes after 11
- This time has been shown to be sensitive in detecting cognitive dysfunction (Freund et al., 2005)



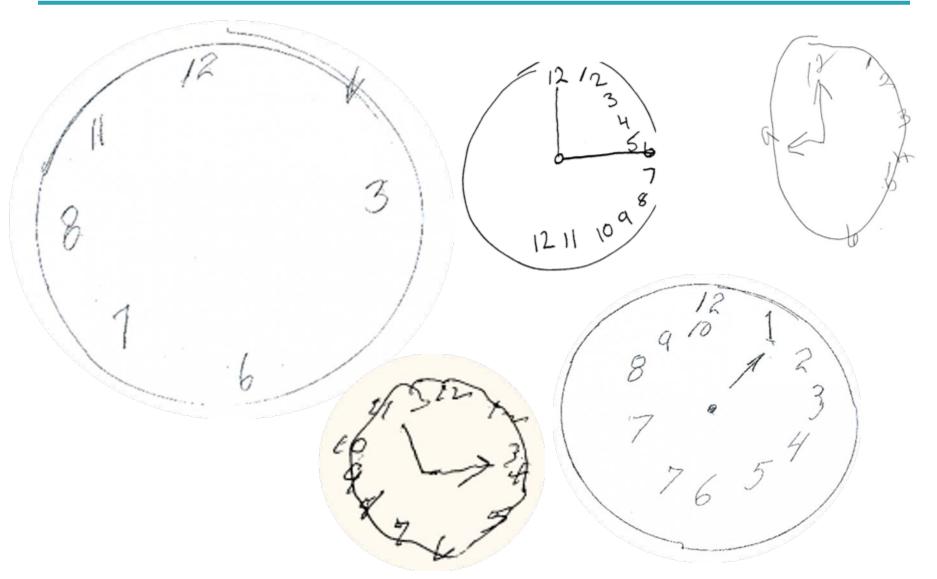
#### **Clock Examples**





#### More Bad Clocks...





## **COGNITION – Trail Making**

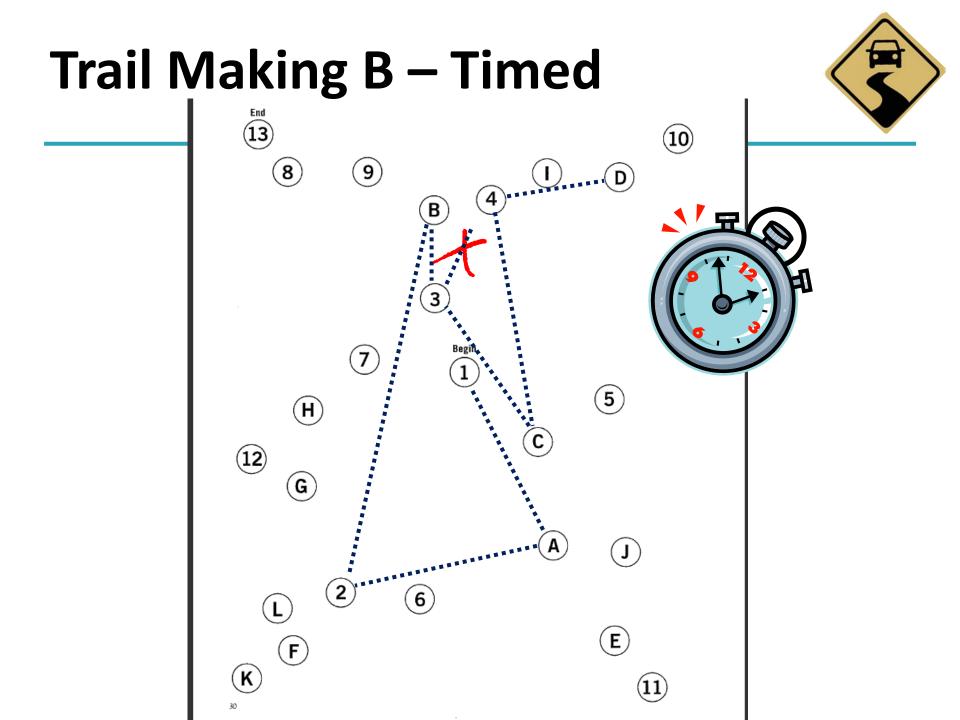


#### This test evaluates cognitive impairment

- Requires near vision and cognitive skills to complete
- Patient uses pencil or pen to make a trail
- Three practice tests are given prior to the timed test

**Goal:** have the patient make logical connections from one item to another, according to the rules





## Trail Making Test (TMT)



#### Interpretation

A time greater than 180 seconds requires further evaluation

- Dementia is a likely cause, but consider false positives
- If no obvious cause for a poor performance is found, dementia is likely, and the patient should be reported to the DMV
- Further testing is required; the DMV may permit ongoing driving for patients with mild dementia dependent upon physician recommendation or OT assessment

### **TMT and Dementia**



#### **Trail Making time**

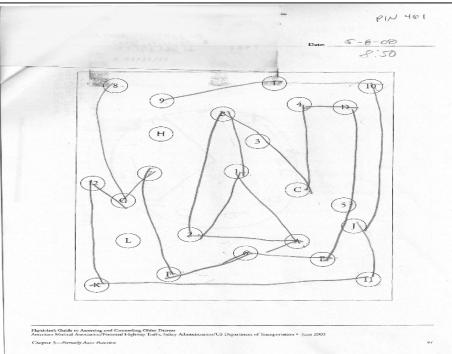
- Under normal controls: average 81 seconds
- In Mild Cognitive Impairment: average 136 seconds
- In patients with Alzheimer's: average 190 seconds

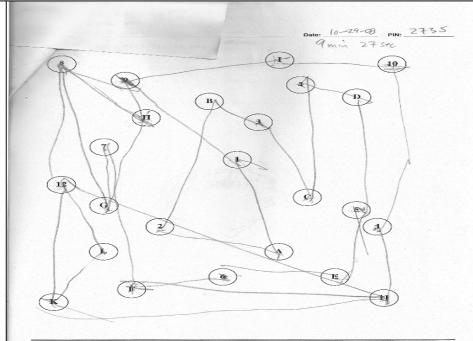
### **Trail Making Examples**



8:50







Physician's Guide to Assessing and Counseling Older Drivers American Medical Association/National Highway Traffic Safety Administration/US Department of Transportation • June 2003 Chapter 3 – *Promally Assess Function* 

## **Cognition and Crashes**



- Lafont confirmed a high correlation between increasing age and poor attentional and executive performance, as measured by Trail-Making B, to be correlated with both crashes and driving cessation (Lafont, 2008)
- 4173 older drivers who took more than 147 seconds on trail making had twice the at-fault crash risk in the following 5 years. (Ball 2006)





- Review of cognition and crashes 2010
- Crashes were associated with:
  - Clinical Dementia Rating >1 (even >.5 may be unsafe)
  - MMSE <24 rated possibly useful</p>
  - Crash in last 5 years rated possibly useful
  - Reduced mileage assoc. with mild dementia
  - Aggressive personality disorder, deliberate
     violation of laws: predictive of crashes in all ages



#### **There are Four Possible Outcomes**

- 1) Pass
- 2) Fail: Vision and/or Frailty
- 3) Fail: Cognitive/Medical History
  - Mandatory DMV Reporting
- 4) Incomplete: Needs to repeat testing

### **Management of PASSES**



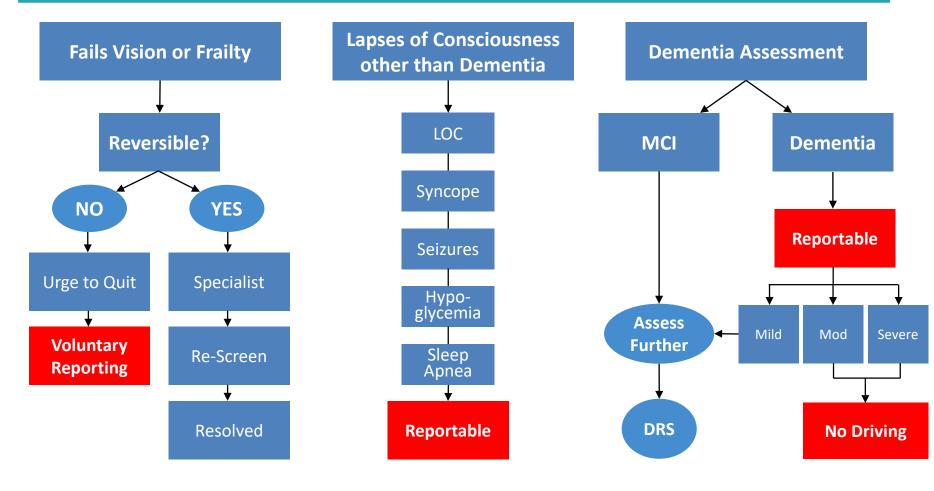
Many older drivers have medical conditions and medications that could impair concentration, strength and cognition in the future

#### Help prolong driving and mobility:

- Treat following evidence based guidelines
- Use the lowest effective dose of drugs
- Promote the general health guidelines

### **Management of FAILS**





## Who Can Help: OT Generalist



- Understands how performance and skills relate to driving
- Evaluates sub-skills necessary for driving
- Uses specific screening tools to assess patient's readiness for referral to driving specialist
- Refers to a DRS and community mobility resources
- Addresses patient's problems or concerns related to driving as an IADL
- Assists with the transition into driving cessation

#### \* Generalists do not evaluate driving competency

## **Driver Rehabilitation Specialist**



- Performs clinical and functional evaluations
- Provides intervention to address and strengthen areas of impairment
- Prescribes vehicle modifications
- Trains for competency using adaptations
- Conducts reassessments for progressive diseases
- Determines the need for driving cessation
- Provides counseling for alternative transportation

Pellerito, J. M., & Schold Davis, E. (2005). Screening driving and community mobility status. OT Practice, 10(5), 9-14.

## **Counseling Older Patients**



- Explain the assessment results and the patient's level of functioning
- Involve the patient in the decision-making process
- Develop a plan to involve family and friends
- Address alternative transportation
- Use the term "driving retirement"

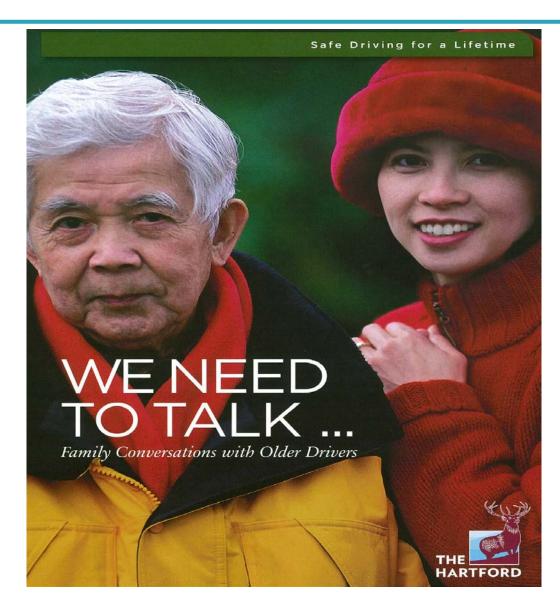
### **Driving Retirement**



- Acknowledge that the patient has suffered a loss
  - If necessary, assess the patient for symptoms of depression and make appropriate referrals
- Explain that driving retirement is for their safety and the safety of others
- Help the patient view the 'positives'
- Discuss possible legal/financial consequences
- Send a follow-up letter to the patient and family

#### Resource





## **Alternative Transportation**

# It is important to discuss alternative transportation with your patients

- Rides from friends and family
- Taxi
- Bus or Senior Shuttle
- Walking
- Delivery Service
- Volunteer Driver
- \* Older adults may initially feel uncomfortable taking public transportation, so friends and family are crucial here









## CA Title 17 Section 2806-2810



"Every physician and surgeon shall report...every patient at least 14 years of age or older whom the physician and surgeon has diagnosed as having a case of a disorder characterized by <u>lapses of</u> <u>consciousness</u>."

#### **'Lapse of Consciousness' refers to conditions that involve:**

- Reduction of alertness or responsiveness to external stimuli
- Inability to perform one or more activities of daily living
- Impaired sensory motor functions used to operate a motor vehicle

http://www.dmv.ca.gov/pubs/vctop/appndxa/hlthsaf/hs103900.htm

## Health and Safety Code 103900



Mandatory reporting of conditions that may progress in severity and are associated with 'lapses of consciousness'

- Narcolepsy, Sleep Apnea
- Abnormal metabolic states
  - hypoglycemia
  - hyperglycemia
- Epilepsy
- Dementia, Alzheimer's Disease
- Brain Tumor
- Syncope

### **Reporting Considerations**



# Making the decision to report a patient may require physician discretion

Factors to consider:

- 1) Did a lapse in consciousness occur?
- 2) Is it related to an on-going condition vs. a one-time event?



#### **Case Example One:**

35-year-old type 1 diabetic was taken to the ED after family found him unresponsive. At initial evaluation, glucose was 32. He said he used the wrong bottle of insulin due to being distressed over a break-up. He comes to you for follow-up.

The ED did not report; do you?





#### **Case Example Two:**

75 year old woman develops gastroenteritis one week-end after attending the church picnic. She ate the potato salad, which made her and others sick. After 2 days of vomiting, she got up from bed and fainted. Her daughter took her to the doctor, who prescribed medication and fluid replacement, and she made an uneventful recovery.





#### **Case Example Three:**

Your patient, a truck driver, admitted to seizing in a motel while on vacation. Besides this episode, he has not had a seizure in five years. On questioning, he admits he left his medication at home but returned the next day and has not missed a dose since. He begs not to be reported because he will lose his commercial driver's license and this was an unusual circumstance.





#### **Case Example Four:**

19-year-old male was hit in the head while surfing and experienced a LOC for 10 minutes. He was immediately taken ashore and never stopped breathing. His friends drove him home but he visits you the next day. He is oriented and all exams and tests are normal.





#### **Case Example Five:**

An 83-year-old woman visits you for the first time after moving from New York to be closer to her daughter. She brings her medical records, which reveal a work-up and diagnosis of mild dementia; she is currently taking Aricept.



## **Reporting is NOT Required**



- Patient's sensory or motor functions are impaired to the extent that patient is unable to ever operate a motor vehicle
- Patient states he/she does not drive and never intends to drive, and the MD believes the statements to be true
- MD previously reported diagnosis and since report, patient has not operated a motor vehicle
- There is documentation in the chart that another MD reported the diagnosis and, since that report, the MD believes the patient has not operated a motor vehicle

## **Provider Liability**



- Physicians are considered negligent if they do not inform patients of medications and medical conditions that can impair driving
  - <u>Physicians may be held liable for civil damages</u> if they clearly failed to report an impaired driver who causes a MVC
  - Immunity is granted to the physician if the patient is reported prior to a MVC
- Document all referrals, recommendations, conversations, and reports (e.g. copy of a driver retirement letter and "do not drive" prescription)



## **Litigation Against Physicians**



Three California cases against physicians who failed to report a patient for Lapse of Consciousness: each unreported patient later experienced an episode while driving that resulted in a death or injury to occupants of other cars

- The first case resulted in a plaintiff verdict of 1.9 million dollars and litigation expenses exceeding \$900,000
- The second case was settled for \$475,000 (along with \$73,000 in expenses)
- The third case was dismissed, but legal expenses were in excess of \$179,000

## **Reporting Responsibility**



- ED Physician: often the first person to see someone with a lapse in consciousness
- Hospitalist: may be the first get a history of recent lapse in consciousness when that is not the presenting complaint
- Primary Care/Specialist: more likely to have contact with patient, and have a detailed history

## **Promote Reporting Practices**



- Know the policy of the risk management or legal department(s) in your institution
- Designate an individual to complete the forms for physician signature
- Have an internal form for patient's record to document that reporting occurred
- Include reporting in QI/QA activities
- Have reporting forms readily available

## **MD Reporting in Canada**



- Correlation between physician reporting and reduced crashes
- Ontario introduced financial incentive to report
  - \$36.25 per report
  - 45% total reduction in annual rate of crashes per 1,000 patients
    - 1,430 crashes reduced to 273 post reporting

### CMR Form 110c

	ale of California-Headile and Human Devices, Agenge		ante Constituent al Public Health			
-		MORBIDITY REPORT				
PLEASE NOTE: Use this form for reporting lapses of consciousness or control, Alzheimer's disease or other conditions which may impair the ability to operate a motor vehicle safely (pursuant to H&S 103909).						
DEPARTMENT OF MOTOR VEHICLES (DMV)						
California Driver License or Identification Card Number (eight characters):						
1. If this report is based upon episodic lapses of consciousness, when was the most recent episode?:						
2. If there have been multiple episodes of	loss of consciousness or control wit	hin the past three years, pleas	se indicate the date	s if they are known to you.		
(a): (b): (b):	(c):	(d):	(e):	(f):( <i>mm/dd/yyyy)</i>		
3. Within the past 12 months, has there be	een an episode of loss of conscious	ness or control while driving?	🗌 Yes 🔲 No	Uncertain		
4. Are additional lapses of consciousness likely to occur?						
5. If the patient has had episodes of nocturnal seizures, is there likelihood of lapses of consciousness occurring while he/she is awake?						
6. Has this patient been diagnosed with dementia or Alzheimer's disease?				Uncertain		
7. Would you currently advise this patient not to drive because of his/her medical condition?				Uncertain		
8. Does this patient's condition represent a permanent driving disability?				Uncertain		
9. Would you recommend a driving evaluation	ation by DMV?		🗌 Yes 📃 No	Uncertain		
Remarks:						



### **DMV Form DS699**





#### REQUEST FOR DRIVER REEXAMINATION

#### INSTRUCTIONS:

- 1. Complete this form if you wish the Department of Motor Vehicles (DMV) to reevaluate a driver's ability to drive safely.
- 2. Sign this request in the signature block provided. Anonymous reports will not be considered unless you are an immediate family member. You may request that your name not be revealed to the individual being reported. Confidentiality will be honored to the fullest extent possible.
- 3. Take your completed request to any DMV office or mail to: DMV, Driver Safety Office (see addresses below for your local office.)

NAME OF PERSON BEING REPORTED (FIRST, M.I., LAST)	DATE OF BIRTH OR APPROXIMATE AGE (619) 555-2222			
B 000003	VEHICLE LICENSE PLATE NUMBER, IF AVAILABLE			
1234 Rural Route Road	San Diego CA 92000			
DRIVER CONDITION—Check all appropriate boxes below. Please use the space below to provide specific details, if known, about the driver's medical (physical or mental) condition such as name of disease or illness, any medications taken, etc.				
<ul> <li>Medical Condition</li> <li>Physical Condition</li> <li>Mental/Emotional Condition</li> <li>Vision Condition</li> <li>Weakness or Coordination Problems</li> <li>Difficulty Walking</li> </ul>	<ul> <li>Confused/Disoriented</li> <li>Alcohol/Drug Use (Describe below)</li> <li>Blackouts, Seizures, Fainting Spells</li> <li>Needs help with daily activities (i.e., cooking, dressing, bath ing, balancing checkbook)</li> <li>Other:</li></ul>			
<ul> <li>DRIVER BEHAVIOR—Check appropriate boxes for driving problems you I</li> <li>Does not see or react to other cars, pedestrians, etc.</li> <li>Drives in wrong lane</li> <li>Drives on wrong side of the road</li> <li>Acts violent or aggressive when driving</li> <li>Drives too slow, or stops, for no reason</li> <li>Has trouble steering, braking, or otherwise controlling car</li> <li>Is confused traffic</li> <li>Gets lost or confused while driving near home</li> <li>Fails to react to affic signals, other cars, pedestrians, etc.</li> <li>Makes turns from wrong lane</li> </ul>	<ul> <li>Turns in front of on-coming cars</li> <li>Allows car to drift in and out of lane</li> <li>Backs up or changes lanes without looking back or checking mirrors</li> <li>Applies brake and gas pedals at the same time</li> <li>Slow reactions that may be caused by medications or drugs</li> <li>Drives on sidewalk</li> <li>Makes driving mistakes while talking to passengers</li> <li>Falls asleep while driving</li> <li>Other actions (Describe below)</li> </ul>			

You may use the space low t be reevaluated by DMV.

low to further describe the driver's condition(s) or action(s) which lead you to believe this driver should Driving poses a serious safety risk to this patient due to...

### **Report Made to DMV**





#### **Driver Safety Officer (DSO) may**

- Take No Action
- Suspend or Revoke License (effective four days from mailing notice)
- Provide Medical Evaluation Form (due within 7-21 days)

## DMV Form DS326 – Page 1



A Public Service Agency (Medical information is CONFIDENTIAL under Section 1808.5 CVC)					C) PHYSICIAN RETURN FORM TO: DEPARTMENT OF MOTOR VEHICLES Licensing Operations Division Driver Safety Branch P. O. Box 934345 MS J-234 Sacramento, CA 95818
<b>INSTRUCTIONS TO THE DRIVER:</b> Please take this form to the medical professional most familiar with your health history and current medical condition. <b>Before</b> giving this form to your medical professional, complete and sign Sections 1-3. <b>PLEASE PRINT LEGIBLY.</b>					
2 throu that co	<i>INSTRUCTIONS TO THE MEDICAL PROFESSIONAL:</i> Please complete Sections 5-13, on pages 2 through 5. The Department of Motor Vehicles' records indicate your patient may have a condition that could affect the safe operation of a motor vehicle. In this case, the department is concerned about the following condition:			may have a condition	
1. DRIVER INFORMATION					
Californian, Calvin				03	01-01-23 A12345678
STREET		Rural Route Road San Diego	CA	g	PATIENT'S DAYTIME OR HOME PHONE NO. 92000 619 555-2222
DRIVER MUST COMPLETE HEALTH HISTORY BELOW. (Please explain any "YES" answers)					
YES	NO		YES	NO	Y
	V	Head, neck, spinal injury, disorders or illnesses			Kidney disease, stones, blood in urine, or dialysis
	V	Seizure, convulsions, or epilepsy			Muscular disease
	Dizziness, fainting, or frequent headaches				Any permanent impairment
Eye problem (except corrective lenses)				Nervous or psychiatric disorder	
	Cardiovascular (heart or blood vessel) disease				Regular or frequent alcohol use
	Heart attack, stroke, or paralysis				Problems with the use of alcohol or drugs
	Lung disease (include tuberculosis, asthma or emphysema)				Other disorders or diseases
Nervous stomach, ulcer, or digestive problems				Any major illness, injury, or operations in last 5 years	
•		Diabetes or high blood sugar			Currently taking medications

EXPLANATION: (Include onset date, diagnosis, medication, doctor's name and address and any current condition or limitation. Attach additional sheet, if needed).

I have had diabetes since 1998 and have been prescribed the drug Aricept ...

## DMV Form DS326 – Page 2



DOES YOUR PATIENT'S MEDICAL CONDITION CURRENTLY AFFECT SAFE DRIVING?

Yes └─ No If yes, please explain:

DO YOU CURRENTLY ADVISE AGAINST DRIVING?

🗹 Yes 🖾 No

MP COMMENTS:

Driving poses a serious safety risk to this patient due to ...

# Severity of Dementia – Page 3



### **Mild Dementia**

 Judgment is relatively intact, but work or social activities are significantly impaired. Ability to safely operate a motor vehicle may or may not be impaired.

### **Moderate Dementia**

 Independent living is hazardous and some degree of supervision is necessary. The individual is unable to cope with the environment and driving would be dangerous.

### **Severe Dementia**

 Activities of daily living are so impaired that continual supervision is required. This person is incapable of driving a motor vehicle.

#### \*As defined by the CA DMV on DS 326 page 3

## DMV Form DS326 – Page 1



WOULD THE SIDE EFFECTS FROM THE PRESCRIBED MEDICATIONS INTERFERE WITH YOUR PATIENT'S ABILITY TO DE

	Yes	🗌 No	If yes, please descri	be:
--	-----	------	-----------------------	-----

DOES YOUR PATIENT'S MEDICAL CONDITION CURRENTLY AFFECT SAFE DRIVING?

Yes 🔄 No If yes, please explain:

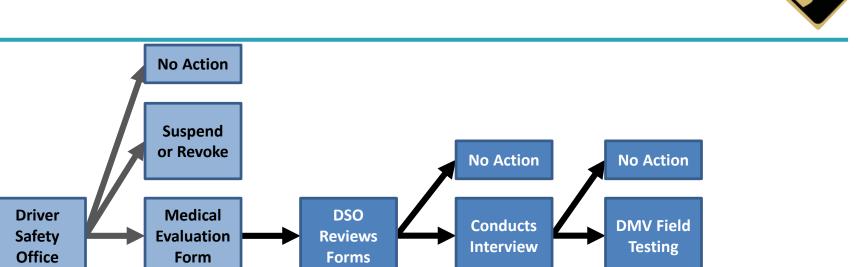
DO YOU CURRENTLY ADVISE AGAINST DRIVING?

Yes 📙 No

MP COMMENTS:

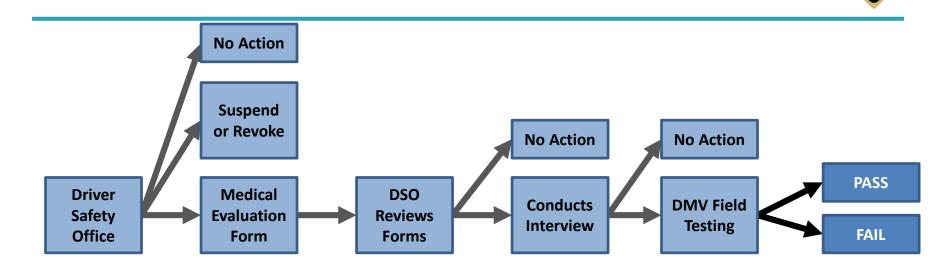
Page 2 of 5

# **DMV Review and Testing**



- DMV reviews Medical Evaluation Form
- Conducts driver interview
- DMV field testing can include vision, written and driving
- Reexamination considerations
  - Desired scope of driving and needs
  - Current knowledge and skills
  - Primary driving environment (rural/urban, time of day)
  - Understanding of condition, treatment, and DMV involvement

### **DMV Outcome**



#### PASS:

#### **Driver retains driving privileges**

- May have Unrestricted License
- May have License Restrictions
- May have Enhanced Monitoring

### FAIL:

#### Driver considered unsafe to drive

- License Suspension/Revocation
- Driver may appeal decision
- Driving evaluation may be appropriate

# Senior Driver Ombudsman



- Role of the Ombudsman is to help the senior keep driving safely
- Help navigate the DMV process
- Also works with people with disabilities, strokes, head injuries, etc.

#### • dmv.ca.gov

#### — Welcome to the DMV's — Senior Driver Ombudsman Program



### **Mobility Matters!**

Do you have questions? We have answers and options!

Los Angeles/Oxnard	310-615-3552
Sacramento/Northern California	916-657-6464
San Francisco/Oakland	510-563-8998
Orange/San Bernardino/San Diego	714-705-1588
Sepler Guide Handbook is available upon a	aguart (DI 625)





- Mileage reduction
- Less access to alternative transportation
- Less access to family members for rides
- Less access to health care
- Increase risk of depression, alcohol, drugs, all risks in their own right

### **Online Tutorial**





### Clinical Assessment of the Older Patient for Driving Fitness

## **Tutorial Components**



### Four Modules with Knowledge Checks

- Module 1: Demographics and Safety Risks of Aging
- Module 2: Screening and Interpretation
- Module 3: Managing Outcomes
- Module 4: Reporting Requirements

**Final Quiz** 

**Certificate of Completion** 



### Resources at treds.ucsd.edu





FOR DRIVING SAFETY

HOME Y WHO WE AR

PROGRAMS

R SOURCES IN THE NEWS CONTACT

### **Health Professionals**

Screening patients for conditions that affect driving

READ MORE





## **Clinical Screening and Assessment**





### **Driving Rehabilitation Specialist**





### **Counseling and Referral**



### CA Title 17 Section 2806 – 2810

"Every physician and surgeon shall report...every patient at least 14 years of age or older whom the physician and surgeon has diagnosed as having a case of a disorder characterized by <u>lapses of consciousness</u>."

#### 'Lapse of Consciousness' refers to conditions that involve

- Reduction of alertness or responsiveness to external stimuli
- Inability to perform one or more activities of daily living
- Impaired sensory motor function used to operate a motor vehicle

### Physician Mandated Reporting of Drivers in California

### Contact



### Training, Research and Education for Driving Safety

University of California, San Diego 9500 Gilman Dr. #0811 La Jolla, CA 92093-0811

> Tel: (858) 534-9330 Fax: (858) 534-9404

Website: TREDS.ucsd.edu Email: TREDS@ucsd.edu