Driving rules in Texas (updated)
“Can I drive doc?”
Sara Austin, MD
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Driving is important

- It affects the ability to maintain a job, education, and even physician visits
- Maintaining the ability to drive has been identified as the number one concern in patients with epilepsy (PWE).
- The state considers driving a privilege and not a ‘right’.
Who regulates this for the state?

- DPS is responsible for issuing all driving licenses - (and has the final say)

- The Medical Advisory Board
  - under the directorship of the Department of State Health Services EMS Certification and Licensing advises DPS regarding medical conditions and driving

How the Medical Advisory Board works

- No individual may appear before the MAB
- The board only reviews the medical facts and reaches an opinion
- The board meets every 2 weeks and reviews about 150-200 cases
- The board is made up of 14 physicians who alternate their time. It is voluntary (but a small stipend is paid)
- After an opinion is reached, a written recommendation is forwarded to the Driver License Division of DPS, and the decision is forwarded to the individual by mail (this takes about 2 weeks).
- They are usually looking for members, especially neurologists!
DPS

- DPS is the licensing agency for driving for Texas.
- DPS is solely responsible for all actions taken or initiated with licensing.
- "Neither the MAB nor the attending physician are legally liable for the decisions or actions taken by DPS in the licensing or un-licensing of drivers."
- If a license is denied or revoked for medical reasons, the decision may be appealed to the courts for final determination.
Your job in this process

- Fill out the medical form to the best of your ability.
- If you don’t know the answer, say that
- If you have a recommendation about driving you may say it in the comments section - comments are welcome but not required
- You are not responsible to know what the driving restrictions are - the MAB will let the driver know that. Your job is to provide the medical facts
Reporting

- Texas does not have mandatory reporting but you do have an ethical and legal obligation to discuss driving with your patients,
- You may report a patient who you suspect is not following the rules
  - The person will be notified by the MAB and will go thru the process
  - This can be anonymous (sort of).

Guide for determining driver limitation

- The last update was done in 1991
- TIA - 6 months driving restriction
- Sleep apnea - no driving for 6 months after control was obtained
- Dementia - not mentioned
- Syncope (any cause, anywhere)- no driving for 1 year
- Hypoglycemia - no driving for 1 year
- Seizures - 6 month restriction, didn’t apply to nocturna sz(?)
- Vertigo - Meniere’s - no driving again.....ever
Goal of update

- Better reflect advances in medical care in the past 23 years
- Better align driving rules with common sense advice given by doctors to patients
- Address specific problems that were not addressed previously. (dementia, implantable defibrillators)
- Should be based on science, practical, practicable, and in general alignment with most other states when possible.
- Recognize that Texas is a diverse state, and that primary care doctors do the majority of these reports

License types

- **Class A** - Commercial drivers (bigger trucks, career driving, >16 passenger buses )
- **Class B** - dump trucks, school buses, >23 passengers
- **Class C** - cars, small trucks, <24 passengers (taxi’s, police cars, ambulance also)
- **Class C can have P, C, D, and E restrictions**
License restrictions (for Class C)

- ‘P’ restriction - Class C license but restricted from driving taxis, buses or emergency vehicles (police or fire, EMS)
- ‘C’ - daytime only
- ‘D’ - not to exceed 45 mph
- ‘E’ - no expressway driving
- C, D, and E restrictions are often used together

- ‘Emergency C’ - Class C without restriction
Seizures (updated rules)

- Seizure free period on or off medications for 3 months for a Class C license with ‘P’ restriction (regular automobile driving) - as long as certain requirements are met:
  - All seizure types are included (except pure simple sensory seizures at the discretion of the physician)
  - Class A, B, and unrestricted C license - no license until 5 years off medication and seizure free

Seizures - requirements that must be met

- Currently under a physician's care
- No evidence for clinical seizures for 3 months
- Specific recommendation from applicant’s physician regarding
  - reliability taking medications
  - avoiding sleep deprivation
  - avoiding alcohol use
Seizures - requirements

- You can recommend a longer period of driving restriction (for example, multiple seizures in the past year, recent psychiatric condition, poor driving history)
- Medication tapers
  - If person at low risk - no driving restriction
  - If person at high risk - 3-6 month restriction
  - If the person non-compliant - no driving
  - If low risk but has a seizure when meds lowered, no restriction after dose increased to previous range

Seizure related MV crashes in AZ

- AZ changed driving restriction from 12 months to 3 months for PWE in 1993.
- Overall MVA's related to seizures make up 0.042% of all crashes (EtOH contributes to 8% of all crashes, 40% fatal)
- Most sz related crashes are single vehicle and most are 'injury'
- The rate of seizure related crashes did not significantly increase in AZ after the interval was decreased from 12 to 3 months
Dementia

- **Dementia** is manifested by the onset of impairment in memory, requires the presence of impairment in at least 1 additional cognitive domain, and those deficit(s) cause significant impairment in social and/or occupational functioning.

- **Mild cognitive impairment** - cognitive impairment in one domain that is greater than that expected with normal aging, but not sufficient to diagnose dementia.

Dementia and driving

- *this is new*

- **The diagnosis of dementia precludes driving unless the person is judged to be safe by**
  - A neuropsychological evaluation of cognitive abilities involved in driving.
  - A driver evaluation by a center or persons trained to evaluate driving ability in the setting of cognitive impairment.
  - Medical assessment by a physician with expertise in evaluating attention, memory, language, visuospatial function in a standardized way.
  - If none of the above options are available, then the individual must make a passing score on the DPS written and driving evaluation.
Dementia: Clinical Dementia Rating (CDR) score

- Recommendation by the AAN Practice Parameter published in 2000
- Persons with a Clinical Dementia Rating (CDR) score of 1.0 or greater are precluded from driving (unless they qualify based on the criteria previously stated)

- Score is based on the MEMORY score only, unless 3 of the secondary categories score above or below the Memory score, in which case the CDR=the majority of the secondary categories

<table>
<thead>
<tr>
<th>Impairment</th>
<th>None (0)</th>
<th>Questionable (0.5)</th>
<th>Mild (1)</th>
<th>Moderate (2)</th>
<th>Severe (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>No memory loss or slight inconsistent forgetfulness</td>
<td>Consistent forgetfulness, partial recall of events.</td>
<td>Moderate memory loss, more marked for recent events; deficit interferes with daily activities.</td>
<td>Severe memory loss; only highly learned material retained.</td>
<td>Severe memory loss; only fragmented remains.</td>
</tr>
<tr>
<td>Orientation</td>
<td>Fully oriented.</td>
<td>Fully oriented except with slight difficulties with time relationships.</td>
<td>Moderate difficulty with time relationships, oriented in familiar areas.</td>
<td>Severe difficulty with time relationships, almost always disoriented in place.</td>
<td>Oriented to person only.</td>
</tr>
<tr>
<td>Judgement &amp; Problem Solving</td>
<td>Solves everyday problems, such as financial affairs; judgement preserved.</td>
<td>Slight difficulty in solving problems, similarities and differences.</td>
<td>Moderate difficulty on handling problems, similarities and differences; social judgement maintained.</td>
<td>Severe difficulty in handling problems, similarities and differences; social judgement impaired.</td>
<td>Unable to make judgements or solve problems.</td>
</tr>
<tr>
<td>Community Affairs</td>
<td>Independent functioning in job, shopping, social groups.</td>
<td>Slight impairment in these activities.</td>
<td>Is not independent in these activities, appears normal to casual inspection.</td>
<td>Is not independent outside home, appears well enough to be taken to events outside the home.</td>
<td>Is not independent outside home, appears too ill to be taken to events outside the home.</td>
</tr>
<tr>
<td>Home and Hobbies</td>
<td>Daily life at home, hobbies and intellectual interests well maintained.</td>
<td>Daily life at home, hobbies and intellectual interests slightly impaired.</td>
<td>Slight impairment of tasks at home, more difficult chores, hobbies and interests are abandoned.</td>
<td>Only simple chores are maintained, restricted interests, poorly maintained.</td>
<td>No significant function at home.</td>
</tr>
</tbody>
</table>

*Source: Berlaucci et al.*
CDR

- The relative risk of crashes for drivers with a CDR score of greater than or equal to 1.0 is greater than our society tolerates for any group of drivers.
- Even an CDR of .5 carries a greater risk of crashes - we recommend but do not require that persons with MCI have a driving test.

Tests that correlate with ability to drive

Trail making test B

Clock drawing test
Dementia

- Persons who are qualified to drive with dementia (consider also for persons with MCI) must be re-qualified to drive every year, or sooner if there is an accident, driving violation, or a family member raises concerns.

- **You versus family versus DPS?** Who should break the bad news that they can no longer drive? (DPS has just a hard of a time with it as you do....). Family members really don’t want to either.

Dementia (and age) data

- 85 year old driver is 1.77x more likely to get in a severe crash compared to age 35-54. If they are front seat passengers, they are 5x more likely to get injured.

- Fatality rate for senior drivers increased 3% in 2012 (while the overall rate decreased)
  - Age 40-45: 3.7 MVA/million miles
  - Age 80-85: 15.1 MVA/million miles
  - Age >85: 38.8 MVA/million miles

- Roughly 50% of AD patients drive for >3 years after diagnosis
- 41-63% of AD patients fail road testing
AMA recommendations for assessment of older drivers

- The American Medical Association (AMA) recommends that physicians adopt the Assessment of Driving-Related Skills (ADReS) battery to risk stratify visual fields by confrontation,
- Visual acuity by the Snellen eye chart,
- adopting the Clock Drawing Task,
- Trails B (a test of visuospatial and psychomotor speed),
- muscle strength, and neck and extremity range of motion.
- (Counseling regarding driving is a Dementia Management Quality measure)

Excessive Drowsiness

- Multiple causes: sleep apnea (OSA), narcolepsy, chronic pain, drug use (legal and illegal), shift work sleep disorder, psychiatric disorders........
- It is the personal responsibility of all drivers to avoid driving if they are unable to maintain alertness when driving.
- Inadequate sleep causes up to 20% of all accidents - most likely related to life style issues
Obstructive Sleep Apnea - Evidence pertaining to driving

- Evidence shows that OSA increases crash risk at least 2-3x controls
- Cofounding effects of obesity, OSA, alcohol ingestion
- The AHI is used as a marker of severity, but there is not 1:1 correlation between severity of OSA and crash risk
- Treatment with CPAP has been shown to decrease crash risk
- Truckers may be at higher risk for OSA in general

- We decided to follow the NHTSA (National Highway Traffic Safety Administration) recommendations about OSA

Obstructive Sleep Apnea (new rules)

- **Severe** (apnea-hypopnea index, AHI>20) precludes driving until treated and person shows compliance (for all classes)
- **Mild** - may drive (all classes) if AHI <10 and ESS <10
- **Moderate** (AHI 10-20) (class C with P) - may drive if OSA is being treated and ESS <10. No recertification
- **Class A or B license or ‘emergency C’ with severe OSA** - must be treated and pass a Maintenance of Wakefulness Test (MWT) to prove that treatment is effective.
  - **Must be recertified annually** -
    - compliant with treatment,
    - low ESS score
Excessive Drowsiness - rules (con’t)

- Drivers with OSA or Excessive Daytime Sleepiness should be recertified for driving if:
  - They have a crash associated with falling asleep
  - They are non-compliant with treatment
  - After they have had surgery for OSA if they want the restriction removed

**EPWORTH SLEEPINESS SCALE FORM**

Instructions: Be as truthful as possible. Print the form. Read the situation in the first column; select your response from the second column; enter that number in the third column. Total all of the entries in the third column and enter the total in the last box.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Responses</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitting and Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching Television</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitting inactive in a public place, for example, a theater or a meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a passenger in a car for an hour without a break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying down to rest in the afternoon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitting and talking to someone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitting quietly after lunch when you’ve had no alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a car while stopped in traffic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SCORE**

A score of 10 or greater indicates a possible sleep disorder. Take the completed form to your doctor.
Narcolepsy

- 60-80% of narcoleptics report having fallen asleep at the wheel at some point
- Cataplexy is also a problem
- 3 month driving restriction is required to assure that treatment is successful.
- There must be an affirmative recommendation from the treating physician (preferably a board certified sleep physician) in order to resume driving

Driving test is recommended

- Moderate to severe Parkinson’s disease (and repeat every year)
- Severe untreated torticollis
- Choreoathetosis
- Post stroke if there is moderate to severe motor, sensory, visual or language impairment
- Post head injury if moderate to severe deficits
Driving test is required if recommended by MD

- Multiple Sclerosis
- Peripheral Neuropathy
- Mild Cognitive Impairment
- Malignancies

Vertigo and dizziness

- No driving if having intermittent or constant uncontrolled vertigo
- No driving if taking sedative medications for the treatment of vertigo
- Driving restriction for commercial vehicles if taking benzo’s or phenothiazines for the treatment of vertigo
Transient Ischemic Attacks

- **No driving restriction** if:
  - The TIA was known to be caused by circumstances not likely to recur
  - The person is compliant with appropriate anticoagulant medication
- **1 month driving restriction** if:
  - Appropriate anticoagulation cannot be used
  - The underlying cause of the TIA cannot be corrected and the TIA is likely to recur

Blackouts

- Vague term that most often means drug or alcohol induced amnesia
- These are self reported fairly often to police and to the MAB
- **6 month driving restriction for someone reported to have had a blackout**
Syncope

- Episode of unexplained syncope - no driving for 6 months
- 6 month driving restriction for vasovagal syncope that
  - occurs while driving, or is
  - uncontrollable or very frequent -
  - (In general, vasovagal syncope does not restrict driving)
- Recurrent uncontrolled syncope (2 or more episodes in 6 months, uncontrollable) - no driving for 1 year
- Syncope that is explained and treated - per physician’s recommendation (typically restrict driving until treatment is effective)

Miscellaneous Cardiac

- Stents - no restriction
- Malignant hypertension - when cleared by physician
- A- fib - when rate is under control and on anti coagulants
Cardiac Dysrhythmias

- PAC’s and PVC’s - no restriction
- WPW if symptomatic - no driving
- VT with syncope or sudden cardiac death -
  - No commercial driving again
  - 6 month restriction for Class C with P restriction if treated
    - With medications and cleared by cardiac electrophysiologist
    - With AICD if cleared by electrophysiologist
- VT, exercise induced, without syncope, non-sustained with normal ventricular function
  - OK for Class C
  - Class A and B license restricted for 1 month

Automatic Implantable Cardio-Defibrillator (AICD)

- Precludes a Class A, B and ‘Emergency’ C license forever
- Class C with P restriction OK after 6 months, if event free
- If the AICD is placed prophylactically only (no events have occurred)- then a Class C license with a P restriction is OK when the person is cleared by their electrophysiologist
Psychiatric diseases

- Don’t fill out the form for psychiatric disease until you have sufficient knowledge to make a valid judgment
- No driving if actively psychotic
- No driving if abnormally aggressive or hostile until treated and condition is in remission
- Psychotropic drugs - specific recommendations from treating MD are helpful
- No driving for someone actively homicidal or suicidal

Alcohol and Drug Abuse

- 1 year driving restriction for persons with known alcohol or drug abuse for Class C license (typically this means they’ve gotten a DWI)
- 2 year restriction for Class A, B and emergency C license
- If the applicant has volunteered for a detox program, and no DWI, then license is OK but periodic reviews are required
- Don’t sign off on the EtOH questions unless you really know
- OK to drive on prescribed narcotics in general but physician always has the duty to restrict driving when appropriate
Metabolic disease

- Dialysis patients can drive (C with P restriction)
- Insulin dependent DM - in general precluded from A or B license unless they get a waiver from their TxDOT physician
- If episode of hypo- or hyperglycemia severe enough to cause
  - Neurological dysfunction - LOC, confusion
  - Any type or degree of vehicle accident
  - Active assistance in treatment
  - Then a 6 month driving restriction
  - Exception for extenuating circumstances such as medication change and severe illness

Vision

- At least 20/40 in one eye (up to 20/70 in one eye but driving restrictions apply)
- OK with diplopia as long as corrected with an eye patch (but I would restrict driving to <45 mph if it is a new problem)
- Visual field must be >140 degrees