# TREDS MEDICATIONS AND DRIVING: A GUIDE FOR HEALTHCARE PRACTITIONERS



## DRIVING UNDER THE INFLUENCE OF DRUGS (DUID)

Many substances, including prescription and over-the-counter drugs, recreationally-used marijuana and other drugs, as well as alcohol, have the potential to interfere with the ability to drive safely. This risk increases with the number of medications consumed. A study by the AAA Foundation for Traffic Safety found that over 90 percent of older drivers take prescription medications, and over two-thirds of those take multiple medications. Research tells us:

- Among drivers tested in fatal vehicle crashes, drivers that test positive for drugs of potential abuse (e.g. cannabis, opioids, and benzodiazepines) now surpass those that test positive for alcohol.<sup>2</sup>
- 64 percent of drivers over the age of 50 responsible for a motor vehicle crash had received a prescription for a potentially driver-impairing medication within the past 60 days.<sup>3</sup>
- Of older road users taking one or more medications, only 28 percent reported an awareness of the potential impact those medications might have on driving performance.<sup>4</sup>
- Only 18 percent of older road users reported receiving a warning from a healthcare professional about medications that may impact driving.<sup>4</sup>



#### HOW MEDICATIONS CAN AFFECT DRIVING

- Similar to alcohol and cannabis, prescription medications can impair the performance of drivers, pedestrians and bicyclists.<sup>2</sup>
- The effects of prescription drugs on driving ability are influenced by dose and variation within and between drug classes. Polypharmacy and drug interactions further influence impairment.

- Mixing prescription drugs with cannabis and alcohol potentiates impairment.
- Herbal and dietary supplements can interact with prescription medications and potentiate side effects.<sup>5</sup>
- Reactions to medication that affect driving safety<sup>6</sup> include:
  - > Blurred vision
  - > Confusion and inability to focus
  - Dizziness
  - Drowsiness
  - > Hypotension and syncope
  - > Shakiness and slowed movement
- The prescription medications most often associated with older road user crashes are benzodiazepines, tricyclic antidepressants, and opioid analgesics.
   Other offending categories of medication<sup>3,7,8</sup> include:
  - > Anti-emetics
  - Antihistamines
  - > Sedatives
  - Over-the-counter medications
- To learn more about the most and least offending medications on driving ability, the TREDS pocket guide on Medications and Driving can be accessed at http://bit.ly/medications-and-driving



#### **DUID AND THE LAW**

- DUID is illegal in every state.9
- Proof of drug impairment is done through roadside testing, and analysis of blood, urine, or saliva.<sup>9</sup>
- A valid prescription cannot be used as a positive defense for a DUID charge.<sup>10</sup>
- The cost of a DUID offense is estimated at more than \$15,000, including fines, legal fees, insurance increases, costs of alternate transportation, lost wages, and other consequences of having a criminal record.<sup>10</sup>



### SUGGESTIONS FOR HEALTHCARE PRACTITIONERS

#### **RESOURCES**

- Practice the "brown bag review." Have patients bring all prescriptions and OTC medications to their medical and pharmacy visits regularly to review for drug interaction and to eliminate unnecessary medications.<sup>11</sup>
- When starting patients on a new medication, use the lowest effective dose and choose the least impairing drug in that class.<sup>6</sup>
- Encourage patients to report side effects from medications.<sup>6</sup>
- Counsel patients on the potential effects of impairing medications on driving ability. Advise use of alternative transportation if medications can impair driving, especially when first prescribed.<sup>6</sup>
- Caution patients about the potential consequences of consuming alcohol or cannabis when using prescription medication.
- Incorporate the topic of medications and driving into the general screening process.

- https://www.nhtsa.gov/risky-driving/drug-impaireddriving - Provides an overview of the issue of drug impaired driving and current legislative movements to the issue.
- http://www.roadwiserx.com/ Allows patients to enter all of their medications to learn about potential drug interactions and each medication's effect on driving ability.
- www.fda.gov/cder Provides access to all known information regarding FDA approved medications, including proper drug use, safety, and storage.
- https://medlineplus.gov/druginformation.html Offers a database of prescription medications, OTC medications, herbs, and supplements and their respective side effects, dosage, and drug interactions.
- https://www.fda.gov/ForConsumers/ConsumerUpdates/ ucm107894.htm - Lists medications that require caution with driving and suggests transportation alternatives.

#### **REFERENCES**

- AAA Foundation for Traffic Safety Understanding Older Drivers: An Examination of Medical Conditions, Medication Use, and Travel Behavior, April 2014 https://aaafoundation.org/wp-content/uploads/2018/01/MedicationTravelBehaviorsReport.pdf
- 2. Governors Highway Safety Association. (2017, April). Drug-Impaired Driving. Retrieved from https://www.ghsa.org/sites/default/files/2017-07/GHSA\_DruggedDriving2017\_FINAL\_revised.pdf
- 3. Literature Review of Polypharmacy and Older Drivers: Identifying Strategies to Study Drug Usage and Driving Functioning Among Older Drivers https://www.sciencedirect.com/science/article/pii/S0196064407002089?via%3Dihub
- 4. AAA Foundation for Traffic Safety Senior Safety and Mobility Study Older Adult's Knowledge About Medications That Can Impact Driving http://aaafoundation.org/older-adults-knowledge-medications-can-impact-driving/
- 5. Herbal and Dietary Supplement-Drug Interactions in Patients with Chronic Illnesses https://www.aafp.org/afp/2008/0101/p73.html
- 6. FDA: Driving When You Are Taking Medications https://www.fda.gov/drugs/resourcesforyou/ucm079514.htm
- FDA Caution: Some Over-the-Counter Medications May Affect Your Driving https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm417426.htm
- 8. Canadian Centre on Substance Abuse: Effects of Drugs on the Body and Driving http://www.ccsa.ca/Resource%20Library/CCSA-Drug-Impaired-Driving-Toolkit-Handout-2016-en.pdf
- GHSA Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States https://www.ghsa.org/sites/default/files/2018-05/GHSA\_DrugImpairedDriving\_FINAL.pdf
- 10. OTS Drugged Driving Campaign https://www.ots.ca.gov/Media\_and\_Research/Campaigns/Drugged\_Driving/default.asp
- 11. Senior Driving AAA: Driving and Medications
  https://seniordriving.aaa.com/resources-family-friends/know-when-be-concerned/driving-medications/

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