

Ten facts about older drivers you can bank on

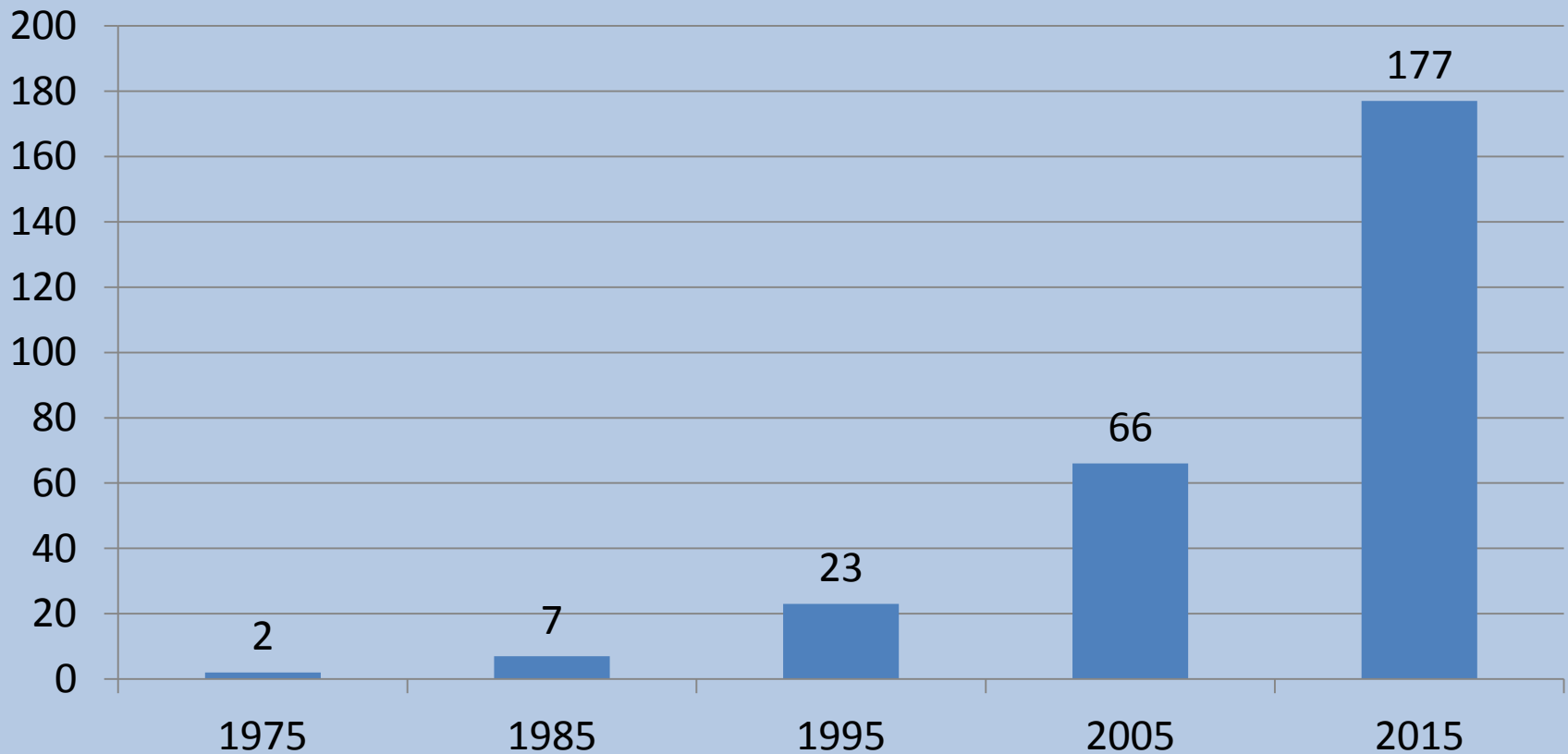
Michel Bédard, Judith Charlton, Lisa Molnar, Jennie Oxley

Background

- Driving supports many older adults' mobility, independence, and quality of life
- The safety of older drivers and other road users is an important health issue
- Older drivers have been under increasing scrutiny in recent years

“Older Drivers” Research

Number of Publications (PubMed)

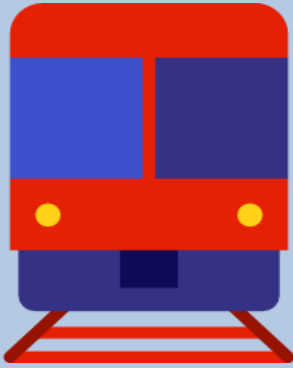


Background

- Research about older drivers has matured considerably
- Moving forward will require that we extend on what we already know
- We offer 10 facts about older drivers you can bank on and hope to spur research in new directions

Methods

- Consensus by four researchers
- Mini-review
- Order does not reflect importance or strength of evidence



Fact 1: Mobility is a right, driving is a privilege



Reference: Peli E, Peli D. (2002). Driving with Confidence: A Practical Guide to Driving with Low Vision.



Fact 2: The proportion of older drivers is increasing in developed countries

Older drivers (85+) are the fastest growing age category of road users.

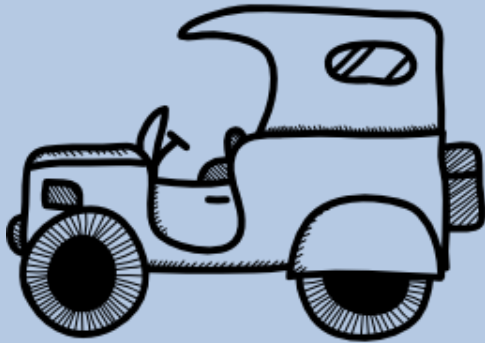
Reference: Federal Highway Administration. (2015). Highway statistics 2014. Retrieved from <https://www.fhwa.dot.gov/policyinformation/statistics/2014/>



Fact 3: It is simplistic and misleading to say that we have an “older driver problem”

Generally safe drivers. Fatality statistics distort the discourse (frailty bias- older adults more likely to die due to their injuries).

Reference: Li, G., Braver, E., Chen, L. (2003). Fragility versus excessive crash involvement as determinants of high death rates per vehicle-mile of travel among older drivers. *Accident Analysis and Prevention*, 35, 227-235



Fact 4: Cohort effects are emerging

Current older drivers may be safer than prior generations. Also drive more now than in the past.

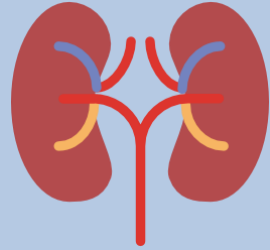
Reference: Mullen, N., Dubois, S., Bédard, M. (2013). Fatality trends and projections for drivers and passengers: Differences between observed and expected fatality rates with a focus on older adults. *Safety Science*, 59, 106-115



Fact 5: No screening approach can identify safe/unsafe drivers with accuracy for general use in older populations

Risk of false positives increases when tools are used in low prevalence situations.

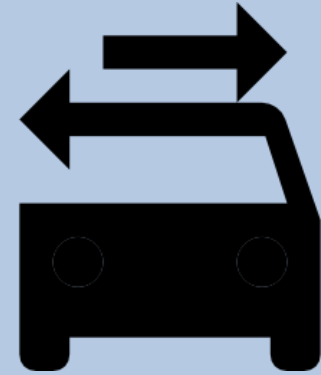
Reference: Hogan, D., Scialfa, C., Caird, J. (2014). Consensus Statements on the Assessment of Older Drivers. *Canadian Geriatrics Journal*, 17, 76-81



Fact 6: Some medical conditions may adversely affect safe driving

Regardless of age. Examples of medical conditions that affect driving include heart disease, diabetes, stroke, and medications (benzodiazepines).

Reference: McGwin, G., Sims, R., Pulley, L., Roseman, J. (2000). American Journal of Epidemiology, 5, 424-431.



Fact 7: Crashes involving older drivers are different than other age cohorts

Older adults more likely involved in crashes at intersections, while turning and changing lanes.

Reference: McGwin, G. & Brown, D. (1999). Characteristics of traffic crashes among young, middle-aged, and older drivers. *Accident Analysis and Prevention*, 31, 181-198



Fact 8: Safe driving results from a combination of skill, behaviour, and appropriate decision-making

Compensatory strategies.

Reference: Crundall, D. & Underwood, G. (1998). Effects of experience and processing demands on visual information acquisition in drivers. *Ergonomics*, 41, 448-458.



Fact 9: Healthy older drivers can improve performance

Evidence supports ability to develop new/refresh skills. Education program involving classroom and on-road training is ideal.

Reference: Marottoli, R., Ness, P., Araujo, K., Iannone, L., Acampora, D., Charpentier, P., Peduzzi, P. (2007). A randomized trial of an education program to enhance older driver performance. *Journal of Gerontology: Medical Sciences*, 10, 1113-1119



Fact 10: Driving is important to older adults' quality of life

Transitioning to non-driving is linked to depressive symptoms.

Reference: Whelan, M., Langford, J., Oxley, J., Koppel, S., Charlton, J. (2006). The Elderly and Mobility: A Review of the Literature. Monash University Accident Research Centre.

Discussion

- When planning new research let's ask ourselves:
 - How will the research benefit older adults?
 - How will the research move us forward?
 - Will the research provide an answer to a key question?
 - Will the research represent an important replication?

Thank you!

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