Improving the Safety of Older Heavy-Vehicle Drivers

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Project Team and Co-Authors

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Background

- In 2014 (NHTSA, 2016):
  - 438,000 large trucks involved in crashes
  - 3,903 deaths
  - 111,000 injuries

- Heavy-vehicle drivers (drivers) age 60+ over-represented in crash statistics (Duke et al., 2010)
Background

  - 21% of Michigan workers in Operations Occupations (including drivers) were age 55+ in 2014
  - 56,100 drivers were employed in Michigan in 2014
Background

- Not enough known about:
  - Age-related risk factors that may contribute to crashes in older drivers
  - Unique safety issues influencing older driver performance
  - Existing preventive strategies for older drivers
  - How to inform new evidence-based preventive strategies for older drivers
Heavy Vehicle Accident Analysis Method
(Newnam and Goode, 2015)
Study Tasks

1. Crash Analysis
2. Synthesis of Literature
3. Group and Individual Structured Interviews with Managers and Drivers
Study Tasks

1. Crash Analysis ★
2. Synthesis of Literature ★
3. Group and Individual Structured Interviews with Managers and Drivers

Student Poster:
Tian Tian: “Improving the Safety of Older Truck Drivers”
Study Tasks

1. Crash Analysis
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Heavy Vehicle Accident Analysis Method (Newnam and Goode, 2015)
Focus Groups: Managers

- Two focus groups (East, West)
- Recruitment Assistance from Michigan Trucking Association
- 15 participants
  - Safety managers/directors
  - Transportation director
  - Service center director
  - Vocational rehabilitation specialist
  - Transportation staffing company director
  - Driver certification support service representative
Focus Groups: Discussion Areas

- Unique positives older drivers bring to the job
- Concerns about older drivers
- Current strategies to help older drivers
- Challenges with current strategies
- Strategies they want to try but have not yet
- Desired additional help from others
Unique Positives Older Drivers Bring to the Job

- Work ethic
- Reliability
- Maturity
- Knowledge
- Experience
- Respect and care for equipment/vehicle
- Superior trip planning
- Pride in job, vehicle, and miles-accident-free
- Loyalty
Concerns about Older Drivers

- Physical demands of loading and unloading
- Memory and other cognitive declines
- Longer delivery time
- Resistance to technology
- Conflicts with younger co-workers
- Cumulative effect of decades living unhealthy
- Wide range of differences among older drivers

“My main concern is that I need more of them!”
Current Strategies to Help Older Drivers

- Build relationships and rapport with drivers; “Check in”
- Provide steps/stairs and straps
- Allow older drivers more time
- Tailor technology training
- Give older drivers easier and/or dedicated runs
- Provide wellness programs

“The littlest things make a difference”
Challenges with Current Strategies

- Need to be careful about age discrimination – strategies must be applicable to all drivers
- Differences in what can be offered to company drivers compared to owner-operators
- Dispatcher interference
- Time pressure from customers
- Unique challenges for small and large carriers
Strategies They Want to Try But Have Not Yet

- Help drivers struggling with memory issues
- Not worry about the bottom-line so much
- Increase the “buy in” for healthy living
- Talk older drivers out of retiring

“You want them to stay longer….how do you make their time the easiest it can be?”
Desired Additional Help from Others

- Resources to help address memory problems
- More frequent medical assessment without penalty to encourage preventive care
- More comprehensive exams – include cognitive assessment
- Access to mobile simulators for assessments and/or training
- Change focus from incident-based approach to prevention
- Better PR for truck driving careers
Next Steps (In Progress)

- Individual interviews with older drivers
- Individual interviews with representatives from regulatory and government agencies
- Conceptual framework development
Thank you!

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