Working Together to Understand & Address Conditions Impacting Aging Drivers

Debra Carney
Driver Fitness Officer
Iowa Department of Transportation
Licensing Aging Drivers

- Iowa Driver Demographics
- Licensing Policies
- Cognitive Screening
- Education and Outreach
Iowa Driver Demographics

Percentage of Iowa Drivers 65 and Older by County on 12/31/2007

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

LIFESAVERS
SAN ANTONIO, TEXAS
APRIL 22-24, 2018
Iowa Driver Demographics

Percentage of Iowa Drivers 65 and Older by County on 12/31/2011

[Map showing percentage of drivers 65 and older by county]
Iowa Driver Demographics

Percentage of Iowa Drivers 65 and Older by County on 12/31/2015

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage 65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lyon</td>
<td>20%</td>
</tr>
<tr>
<td>Ogle</td>
<td>23%</td>
</tr>
<tr>
<td>Osceola</td>
<td>26%</td>
</tr>
<tr>
<td>Cherokee</td>
<td>28%</td>
</tr>
<tr>
<td>Essex</td>
<td>24%</td>
</tr>
<tr>
<td>Winnebago</td>
<td>24%</td>
</tr>
<tr>
<td>Worth</td>
<td>23%</td>
</tr>
<tr>
<td>Muscatine</td>
<td>24%</td>
</tr>
<tr>
<td>Howard</td>
<td>24%</td>
</tr>
<tr>
<td>Winneshiek</td>
<td>23%</td>
</tr>
<tr>
<td>Allamakee</td>
<td>29%</td>
</tr>
</tbody>
</table>

... (map showing percentages for each county)
Iowa Driver Demographics

Percentage of Iowa Drivers 65 and Older by County on 12/31/2017

52 counties – 25%-30%
Licensing Policies - Renewal

- Age 70 and older
  - In-person renewal
  - Vision screening required
  - Two-year license term
Restricted License

- Vision standards
- Eye specialist recommendation
- Health care professional recommendation
- Driving performance
Restricted License

- Left and right outside mirrors
- No driving when headlights are required
- Medical Report required at renewal
- Vision Report required at renewal
- No interstate or freeway driving
- Maximum speeds
- Limited speed zones
- Radius of residence
- Special permit
Local Driving Test

- Familiar area

- Restricted privileges
  - Small town
  - Radius of residence
  - No interstate or freeway
  - Speed restriction
Reexamination / Referral

- Peace officer request
- Physician request
- Citizen request
- Crash review
  - Fatality
  - Driver condition
  - Driver action
Reexamination / Referral

- Vision screening/Vision report
- Cognitive screening
- Medical report
- Knowledge exam
- Driving exam
Medical Advisory Board

- Coordinated through Iowa Medical Society
- Provide guidance on policies
- Case review, driving recommendations
Identification Cards

No fee ID Card:

• Surrendering driving privileges
• Suspensions – capability reasons
• Homebound
Cognitive Screening

DRIVER ORIENTATION SCREEN FOR COGNITIVE IMPAIRMENT (DOSCI)

CLIENT NAME: ________________  Customer No. ____________________________

Last Name  First Name  Middle Name

REASON FOR SCREENING:  □ Re-exam  □ Recall  □ Line Exam  □ Local DT  □ Hearing
□ Other, state reason: ____________________________

Start Time:  ____________________________  End Time:  ____________________________

CORRECT □  INCORRECT □  ASK EACH OF THE FOLLOWING NINE QUESTIONS:

1. What is your date of birth?
   ¿Cuál es su fecha de nacimiento?  Month, day and year required; must match documents

2. What is your full home address?
   ¿Cuáles es su dirección (número, calle, ciudad, estado)?
   Address must match documents; if not, prompt for address listed on documents

3. What state are we in now?
   ¿En qué estado estamos en este momento?

4. What city/town are we in now?
   ¿En qué ciudad estamos en este momento?
   Within reasonable proximity

5. Without looking at your watch, can you estimate what time it is now?
   ¿Sin mirar su reloj, puede decirme aproximadamente qué hora es?
   Answer must be plus or minus one hour of correct time

6. What day of the week is it?
   ¿Qué día de la semana es hoy?
   Prompt for correct day, if needed

7-9. What is today's date?
   ¿Cuál es la fecha de hoy?
   Prompt for month, day and year, if needed
   □ Month (MM)
   □ Day (DD)
   □ Year (YYYY)

SCORING CRITERIA

5 or more incorrect → probable cognitive impairment
3-4 incorrect → possible cognitive impairment
0-2 incorrect → consider all circumstances

OUTCOME

□ MEDICAL REPORT REQUIRED BASED ON DOSCI
□ DRIVE TEST REQUIRED BASED ON DOSCI
□ NO ACTION

Comments: ____________________________

Screened by: ____________________________  Date: ____________________________

□ Examiner  □ DLCS  □ DL Clerk  □ DL Clerk  □ Other: ____________________________

CT/DL Station: ____________________________

IOWA DOT

Prepared: ____________________________
Electronic DOSCI Forms

Ask Each of the following nine questions:

1. What is your date of birth?
   Month, day and year required: must match documents
2. What is your full home address?
   Address must match document: if not, prompt for address listed on documents
3. What state are we in now?
4. What city/town are we in now?
   Within reasonable proximity
5. Without looking at your watch, can you estimate what time it is now?
   Answer must be plus or minus one hour of the correct time
6. What day of the week is it?
   Prompt for correct day, if needed
7-9. What is today's date?
   Month
   Day
   Year
Electronic DOSCI Forms

Ask Each of the following nine questions:

1. What is your date of birth?
   Month, day and year required: must match documents

2. What is your full home address?
   Address must match document: if not, prompt for address listed on documents

3. What state are we in now?

4. What city/town are we in now?
   Within reasonable proximity

5. Without looking at your watch, can you estimate what time it is now?
   Answer must be plus or minus one hour of the correct time

6. What day of the week is it?
   Prompt for correct day, if needed

7-9. What is today's date?
   Month,
   Day,
   Year

2 Incorrect - consider all circumstances

Outcome: Passed

Comments: Medical Report Required
No Action - Examiner Discretion
No Action - Physician Contact

Score Only
Save
Cancel
# DRIVER ORIENTATION SCREEN FOR COGNITIVE IMPAIRMENT (DOSCI)

## CLIENT NAME:

Customer Number

## REASON FOR SCREENING: N/A

- Other, state reason:

| Start Time: | 03-06-18 9:33 p.m. |
| Correct | Incorrect |

1. What is your date of birth?
   - Month, day and year required; must match documents

2. What is your full home address?
   - Address must match document; if not, prompt for address listed on documents

3. What state are we in now?

4. What city/town are we in now?
   - Within reasonable proximity

5. Without looking at your watch, can you estimate what time it is now?
   - Answer must be plus or minus one hour of correct time

6. What day of the week is it?
   - Prompt for correct day, if needed

7. 8. What is today's date?
   - Prompt for month, day and year, if needed
   - Month
   - Day
   - Year

### SCORING CRITERIA

- 5 or more incorrect → probable cognitive impairment
- 3-4 incorrect → possible cognitive impairment
- 0-2 incorrect → consider all circumstances

| Correct | Incorrect |

End Time:

03-06-18 1:33 p.m.

Outcome: **Passed**
Electronic DOSCI Forms

DOSCI Result Stored in EMREMS

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
<th>Date</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Exam</td>
<td></td>
<td>02/20/2018</td>
<td></td>
</tr>
<tr>
<td>Driving Test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision Screening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOSCI</td>
<td>Passed</td>
<td>02/20/2018</td>
<td>Physical Ability</td>
</tr>
</tbody>
</table>

IOWA DOT

LIFESAVERS

SAN ANTONIO
TEXAS

APRIL 22-24 2018
Licensing Status 2017

270 people scored 3-4 incorrect

105  (38.9%)  License suspended or denied

64   (23.7%)  Voluntarily surrendered license

92   (34.1%)  License renewed

9    (3.3%)   Deceased
134 people scored 5 or more incorrect

58  (43.3%)  License suspended or denied

45  (33.6%)  Voluntarily surrendered license

28  (20.9%)  License renewed

3   (2.2%)   Deceased
Licensing Status Summary

• 63% of customers that missed 3-4 DOSCI questions no longer have a license to drive

• 77% of customers that missed 5 or more DOSCI questions no longer have a license to drive
Safe Driving Basics (SDB)

Press here for Re-Exam Medical Review

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Safe Driving Basics (SDB)

- Implementation Fall, 2015
- Referrals for reexamination
- Appeals
- Voluntary screening available
Safe Driving Basics (SDB)

Laptop/tablet
- Portable
- Touch screen
- Tent mode
- Removes keyboard
- Finger/Stylus
- Headphones
Safe Driving Basics (SDB)

Touching and Drawing Practice

On each of the pages that follow, you will be asked to touch or draw on the screen. The examples below will help you get the feel of these actions. Repeat these examples until you feel confident that you can touch and draw on the screen.

Touch '1' below, then touch '2', then touch '3'.

1 2 3

Ready? Press to Continue

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Safe Driving Basics (SDB)

- Visual Search A
- 90 seconds allowed
- Must pass all exercises
Safe Driving Basics (SDB)

- Visual Search B
- 180 seconds allowed
- Must pass all exercises
Safe Driving Basics (SDB)

- Visualizing Missing Information
- Can miss 4 of 11
- Must pass all exercises
Safe Driving Basics (SDB)

**Safe Driving BASICS**

**Brief Auto-Screening Instrument for Cognitive Status**

<table>
<thead>
<tr>
<th>Screening Procedure</th>
<th>Pass if less than</th>
<th>Your Result</th>
<th>Pass?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Search - Part A</td>
<td>90</td>
<td>70 secs</td>
<td>Yes</td>
</tr>
<tr>
<td>Visual Search - Part B</td>
<td>180</td>
<td>361 secs</td>
<td>No</td>
</tr>
<tr>
<td>Visualizing Missing Information</td>
<td>5</td>
<td>3 incorrect</td>
<td>Yes</td>
</tr>
</tbody>
</table>

DL: [Space]

Date: 07/12/2017

Powered by DrivingHealth® Inventory

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IOWADOT

SAN ANTONIO, TEXAS - LIFESAVERS APRIL 22-24, 2018
Safe Driving Basics (SDB)

SDB results stored in EMREMS:

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Result</th>
<th>Referral Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReExam</td>
<td>06/14/2017</td>
<td></td>
</tr>
<tr>
<td>Driving Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision Screening</td>
<td>Passed</td>
<td>07/12/2017</td>
</tr>
<tr>
<td>Safe Driving Basics (Medical)</td>
<td>Medical Report Required</td>
<td>07/12/2017</td>
</tr>
<tr>
<td>DOSCI</td>
<td>Medical Report Required</td>
<td>07/12/2017</td>
</tr>
<tr>
<td>Disposition</td>
<td>License Denied, FTA</td>
<td>12/12/2017</td>
</tr>
</tbody>
</table>
Safe Driving Basics (SDB)

Information for Health Professional

The driver has completed Safe Driving Basics, a series of brief exercises designed to detect possible impairments in cognitive function that have been shown to significantly increase crash risk. Specifically, the exercises screen for deficits in visual search, visual attention and divided attention, visual information processing speed, and visuospatial ability.

Because the driver’s screening results on one or more of the exercises place him or her in a group at significantly elevated risk of a crash, a medical report is required.

- Please evaluate the need for a cognitive evaluation and provide your patient a referral for that type of evaluation, when deemed necessary. The attached medical report should be completed after you receive the results of the cognitive evaluation.

OR

- If no further cognitive evaluation is recommended at this time, please complete the attached medical report.

Please feel free to contact me if you need further information.
HOW DOES FUNCTIONAL SCREENING RELATE TO SAFE DRIVING?

Research has found that drivers who fall below particular performance levels on measures of the most basic visual, mental, and physical abilities needed to drive safely are up to 5 times more likely to be in a crash. A loss in a basic ability does not mean that a crash is certain. Nor does excellent driving health guarantee crash-free experience -- caution and good judgment are always important. But a poor screening result can be a warning flag that a person is placing himself or herself -- and others -- at significantly higher risk, and may need to be evaluated by a medical professional or certified driving rehabilitation specialist to safely stay behind the wheel. The following mental, or cognitive, abilities are key to safe driving:

**Visual search with divided attention.** This screening measure asks you to locate letters and numbers scattered randomly across a page, in a particular order, as fast as you can. When driving, you must quickly scan across the entire scene to detect other cars, pedestrians, and bicyclists and take notice of important road features, traffic signs, and traffic signals. This is especially important at intersections, where you also must pay attention to particular things in a particular order. For example, when you are about to start moving after a traffic light turns green, you might first shift your attention from the signal to check for cross traffic, then make sure there are no conflicts with pedestrians or cyclists, then focus on the location across the intersection that you want to move toward. Being able to shift attention quickly among many different places is fundamental to safe driving.

**Visualizing missing information.** Often you must “fill in” missing information to recognize a whole object when only part of it is in view. This screening measure uses simple line drawings with missing parts to see how well you can do this. This ability helps you become aware of many different kinds of potential threats and critical safety information as you drive. It could be a bicyclist, or a pedestrian stepping out from behind a parked car; a warning or stop sign that is partially obscured by brush at the side of the road; or another car coming out of an alley, that is hidden from view except for its leading edges. Without early recognition of such threats, you won’t be as likely to steer or brake in time to avoid a crash.

*Follow up on problems that are first detected during screening --- and keep driving safely longer!*
Safe Driving Basics (SDB)

• 10-15 minute screening

• Small number of drivers cannot use it
  • Physical issues, tremors
  • Language barrier
Safe Driving Basics (SDB)

- Increases health care professional’s awareness of cognitive issues
- Increase in referrals to driver evaluation programs
Experience changes:

Vision
Hearing
Physical
CarFit

Partner with AARP, AAA, & OT programs
Senior Health Festival

Mobile DL Station – DOT2GO

CarFit

Information
Thank you!

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Please use the Lifesaversers Conference Mobile App to evaluate this presentation.