

## Driving Skills Impaired when BAC is Less Than 0.08

When an operator has a BAC that is not very high a defense may be offered that the driving skills of the defendant were not really significantly impaired. The research shows, however, that threshold impairment levels (i.e. the lowest BAC at which measureable impairment is observed) occurs for many driving skills at levels well below .08. Low BAC Driver Impairment contains a digest of the literature on low BAC effects on driving taken from

Moskowitz, H., & Robinson, C. D. (1988). Effects of low doses of alcohol on driving-related skills: A review of the evidence. (Report No. DOT HS 807 280) Washington, DC: National Highway Traffic Safety Administration, SRA Technologies, Inc.

The sample below includes those skills involved in scenario in which a pedestrian is struck while walking on a rural road. The breakdown of skills for several other specific crash scenarios is included in the publication Low BAC Driver Impairment, available at [www.legalsciences.com](http://www.legalsciences.com)

## Scenario: Pedestrian struck while walking along road

Driving skill (bibliography reference #)	First Measurable Impairment
<b>simple reaction time</b> (1) Time from decision to the onset of the reaction response.	.03
<b>choice reaction time</b> (2) Time to make response choice- braking, steering, sounding horn.	.03
<b>tracking</b> (6,7,8,35) Ability to keep vehicle on traveled part of road and avoid swerving across fog line or crossing the center line or into another lane of travel.	.03
<b>concentrated attention</b> (9) Ability to focus on roadway and maintain vigilance and forward gaze.	.07
<b>visual reaction time</b> (12,13)	.04
<b>response to central stimuli</b> (14) Impaired response to stimulus within acute field of vision.	.04
<b>visual search</b> (15,24) Ability to maintain searching pattern for objects on or about the roadway.	.05
<b>visual recognition</b> (15) Ability to recognize objects after they have been perceived.	.07

<b>visual information processing</b> (17)	.06
Recognition and decision-making ability, using visual information.	
<b>information processing rate</b> (18,19)	.07
Time to process from the point of perception to the point of recognition.	
<b>double vision, other vision impairment</b> (10,22)	.05
Ability to focus and perceive an image clearly, thus affecting recognition of the pedestrian being in a dangerous position.	
<b>contrast sensitivity</b> (25)	.05
Ability to “see” an object, based on the contrast of the object with the background or environment.	
<b>stereoacuity</b> (45)	.05
Ability to focus both eyes sharply on an object, thus affecting perception and recognition of distance between vehicle and object.	
<b>depth perception</b> (28)	.08
Ability to determine distance between subject (and subject’s vehicle) and object being perceived.	
<b>time perception</b> (30)	.04
Subject has a distorted perception of time, and may feel that situation is occurring in slow motion, or may portray a distorted perception of time in describing a situation.	
<b>perception time for visual stimulus</b> (31)	.05
Time to “see” the pedestrian before any recognition or reaction can take place.	
<b>vehicle alignment</b> (34)	.03
Vehicle suddenly tracks off roadway or is driving in breakdown lane.	
<b>impaired tracking, steering, braking, gear changing</b> (35)	.03
Basic driving skills are impaired.	
<b>emergency braking response</b> (36)	.04
Operator is not fully able to execute an emergency braking action in response to danger or necessity stimulus.	
<b>distance judgement</b> (23,28,38)	.07
Ability to judge distance is impaired.	
<b>lateral position error, steering correction time</b> (40)	.07
Driver operates in the breakdown lane; time to realign the vehicle in response to a stimulus is lengthened	