

WHAT ARE THE ODDS OF YOUR BEING INJURED IN A LOW SPEED COLLISION? KNOW YOUR RISK FACTORS

Meet Jennifer, the world's unluckiest driver.

Jennifer is a very fit 50-something babe, grooving to the beat in her red Mustang as she idly watches the people get off the bus stopped in front of her. Jen was contemplating the kid with the purple Mohawk when – Wham! An SUV skids on the pavement and slams into her from behind.

Jen was shaky and disoriented, but she calmed herself down and got out of her car. She was relieved that there was only the tiniest dent on the left side of her bumper. Her neck hurt when she tried to look around, but not nearly so bad as when she was in that fender bender 10 years ago. The drivers exchanged information, but neither car was damaged and they both considered it not a big deal.

Two weeks later, Jen was not better. Her neck hurt all the time, the base of her skull was really sore, she had a headache when she woke up in the morning and her left shoulder was starting to bother her.

Lawyers wouldn't touch her case. No crash, no cash, they said, referring to the fact that her car wasn't damaged. Doctors told her there was nothing wrong with her. She couldn't get help from anyone.

Too bad. None of them realized that poor Jen had every risk factor for injury in a low speed rear end collision. Add those risk factors to the already significant risk of injury in a low speed collision, and you have a recipe for long-term pain and dysfunction.

Study after scientific study has demonstrated that the following factors increase your risk of injury:

I. LACK OF AWARENESS OF THE CRASH

For reasons no one can quite figure out, you are 15 TIMES MORE LIKELY TO BE INJURED if you are not aware that a crash is about to happen.

2. HEAD TURNED AT THE TIME OF IMPACT

If your head is turned to the right or the left at the time of the collision, your body will be subjected to much more complex forces than if you are looking straight ahead. In most of the crash testing using human volunteers, the participants have been looking straight ahead. In real life, people's heads are turned. They are looking at one of the mirrors. They are fiddling with the CD player, or reaching for their cell phones. Even a small change in position can result in a greater likelihood of injury.

For the same reason, an occupant who is out of position (for example, leaning forward or twisted one way or another) is also at greater risk of acute injury.

3. VEHICLE STRUCK AT AN ANGLE

For the same reason, you may be subject to greater injury if the car is struck more to the right or the left rather than straight on. The spine will be subjected to rotational

forces when the car is struck at an angle, placing it at greater risk of injury – with the same biodynamics as the “out of position” occupant.

4. BAD LUCK FOR CHICKS

Alas, women are at much more likely to be injured in rear end collisions than men are. They are also at a much higher risk of developing chronic whiplash pain. Why? There are a number of theories.

It could be that because most women lack strong, protective musculature in their necks, their heads are thrown back and forward more violently than men. This has been confirmed by studies using ultra-sensitive sensors attached to the neck. These instruments have shown that women’s necks bend more sharply at every segment of the cervical spinal column in a whiplash injury.

It may also be that because women are relatively lighter than men, they offer less resistance to the automobile seat as it moves into them, so they are catapulted forward much sooner and more violently, resulting in much higher head acceleration. Higher head acceleration means much more strain is being placed on the neck and the head.

Because of these facts of biology and physics, we would expect that women suffer greater neck injury and more traumatic brain injury. And that is exactly what the studies show.

**SAMPLE RESEARCH DATA RE: RATES OF INJURY TO THE
NECK IN REAR END COLLISIONS: FEMALES VS. MALES**

Studies:	Neck Injuries to Women	Neck Injuries to Men
Pearce	71%	29%
Hohl	61%	39%
Balla	64%	36%
Deans	46%	54%

5. Age

Old age is hell, my grandmother used to say. It's certainly seems to be true in car accidents.

It's not age in itself, its what age does to our bodies. As we age, our discs get a little stiffer. Our reflexes slow down. Maybe some arthritis has crept into our joints. Our muscles and ligaments are less flexible and less strong. Healing times increase. We are less able to tolerate strains, sprains and forces. Hence the likelihood of injury to the neck in a rear end collision is greater.

6. PRE EXISTING INJURIES OR CONDITIONS

It stands to reason: if you already have instability in or prior injury to your spine, muscles or joints, they are going to fare worse under the tremendous force of a rear end collision.

A past history of neck pain or headache, ligamentous instability, or degenerative changes to the bones predisposes us to chronic injuries as a result of whiplash.

7. Pain at the Time of Impact

While it is common for symptoms to be delayed for 24-72 hours after an accident, some victims experience pain immediately at the time of the collision. Studies have shown that victims who experience immediate or early onset of symptoms (that is, within 12 hours) and/or severe initial symptoms are more likely to suffer chronic pain as a result.

This may be because immediate pain signals a more significant injury, one that is likely to have chronic health implications.

8. LOSS OF CERVICAL RANGE OF MOTION

One of the predictors of a chronic course in whiplash injury is the loss of cervical range of motion right after an accident. A victim who finds it difficult to turn their head is at higher risk of chronic neck pain down the road.

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