

Risk for Late (Chronic) Whiplash

The following risk factors (based on solid scientific research) help explain why some patients involved in Low Speed Rear Impact Collisions (LOSRIIC) get injured and others do not. These risk factors are associated with the potential to develop chronic pain after a LOSRIIC. Other issues to consider include, change of velocity, G force, threshold of injury, vehicle mass, and examination findings.

- ❑ Female gender
- ❑ Rear vector vs. other vectors
- ❑ Body mass index in females only
- ❑ Immediate/early onset of symptoms (i.e., within 12 hours) and/or severe initial symptoms
- ❑ Ligamentous instability.
- ❑ Initial back pain
- ❑ Greater subjective cognitive impairment
- ❑ Greater number of initial symptoms
- ❑ Use of seat belt shoulder harness. For neck (not back) pain; non-use had a protective effect.
- ❑ Initial physical findings of limited range of motion
- ❑ Neck Pain on palpation
- ❑ Muscle pain
- ❑ Initial neurological symptoms. Radiating pain to the upper extremities.
- ❑ Past history of neck pain or headache.
- ❑ Headache
- ❑ Initial degenerative changes seen on radiographs
- ❑ Loss or reversal of cervical lordosis
- ❑ Increasing age (i.e., middle age and beyond)
- ❑ Front seat position
- ❑ Target vehicles manufactured from late 1988s through the 1990s (OR=2.7 vs in the early 1980s vehicles. (Rear Impact Only)