Whiplash--The Epidemic

Dr. John T. Waite

Why call Whiplash an epidemic?

- More than 3 million Americans are injured this way each year.
- The reported risk of injury in a low speed rear impact crash (LOSRIC) is 35-68%.
- The Japanese Automobile Insurance Rating Association reports a 50% neck injury rate.
- About 10% of those injured become permanently disabled.
- "Minor" neck injuries account for up to 60% of all permanent impairment claims.
- Nearly half of all chronic neck pain in America is due to LOSRIC.
- About 9% of all Americans suffer from chronic neck pain due to LOSRIC.

So, for every 6,000,000 occupants in a low speed rear impact crash:

- 1. About 3,000,000 will be injured.
- 2. About 1,500,000 will have chronic pain.
- 3. About 300,000 of these will also become disabled.

Crash Facts:

- Most cars withstand 8-12 mph impacts without structural damage.
- Most injuries occur at crash speeds below 12 mph.
- More than half of all injuries occur without vehicle damage.
- There is no correlation between vehicle damage and outcome.
- The peak acceleration of the head is much greater than the peak acceleration of the vehicle.

A 5 mph change in velocity crash typically produces about 10-12 g of acceleration of the head.

Increased Risk Factors:

- Prior Spinal Injury
- Prior Headaches or Neck Pain
- Female Gender
- Inadequate Head Restraint
- Head Turned
- Rear Impact
- Advanced Age
- Spinal Arthritis
- Disc Disease or herniation

- Non-Failure of Seat Shoulder Harness
- Poor Position in Vehicle
- Non-Awareness
- Metabolic Disorders
- Spinal or Foraminal Stenosis
- Prior Vertebral Fracture
- Osteoporosis
- Congenital Spine Anomalies

What we can say for sure is that though not all low speed accidents cause injuries, many low speed accidents can cause significant injuries. Only an experienced physician who has performed a good interview, record review, and soft-tissue exam can make this determination.