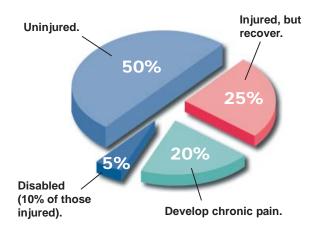
Statistics and Risk Factors

Statistics of whiplash injury:

- More than 3 million Americans are injured this way each year.
- The reported <u>risk</u> 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.
- So, for every 6,000,000 occupants in LOSRIC:
 - 1. About 3,000,000 will be <u>injured</u>.
 - 2. About 1,500,000 will have <u>chronic pain</u>. About 300,000 of *these* will also become <u>disabled</u>; usually due to pain.
- Nearly half of all chronic neck pain in America is due to car crashes—mostly LOSRIC.
- About 9% of all Americans suffer from chronic neck pain due to LOSRIC.
- Kids are at 2/3 the risk of adults.

All crashes:



Size of the problem:

The population of:



= the number injured each year.



= the number who develop chronic pain each year.



= the number who become <u>disabled</u> each year.

Risk factors for injury and/or poor outcome:

- Rear direction impact.
- Limited range of motion; neurological symptoms after the crash.
- Ligamentous instability after crash.
- Degenerative disease, headaches, or neck injury or pain prior to crash.
- Head turned at impact, or occupant in poor position at impact.
- Non-awareness of impact.
- Non-failure of seat back.
- The use of seat belt/shoulder harness.*
- No head restraint or poor head restraint position.
- Female gender or advanced age.



