Topic: Accident Reconstruction and Biomechanics

Message/headline: Accident Reconstruction + Biomechanics
Thorough Investigation

Effect of a seat belt on crash injuries.

A truck turned left in front of an oncoming car. The unrestrained front passenger suffered a severe fracture to her right ankle. Our accident reconstruction expert inspected the vehicle and crash scene evidence and analyzed the vehicle crush patterns. We quantified the pre and post-impact speeds ~~and~~ ,the directions of travel of both vehicles and calculated the delta V of the car during the crash.

Our biomechanics expert used the vehicle analysis to determine the passenger's motions and the forces she suffered. Also, predictions were calculated for a restrained passenger in the same crash. Vehicle evidence and witness testimony proved that the passenger braced prior to the crash. Due to her pre-impact bracing, sufficient force to cause a fracture would have been transmitted to the passenger's ankle-even if she had been wearing her seat belt.