

## How Does Your Head Restraint Measure Up?

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Whiplash injury, in some circles, is nearly synonymous with fraud or malingering: the claimants looked upon as priggish and their doctors as venal. Its ill-deserved reputation is besmirched by the 10 percent or so of true fraud, but the rest of the stigma can be attributed to the common association with litigation, and the diffidence that goes hand in hand with such issues.

Think about it. The so-called soft tissue lesion is hard to prove. Objective evidence is scarce. Therefore, the claimant is probably malingering, at least so goes the popular argument. We hear it every day. Even the words "soft tissue injury" cause eyes to roll and tongues to click. Take a look at the medical and chiropractic literature: with titles like Whiplash: Illness or Injury?, or Whiplash: Iatrogenic Illness?, you'll quickly realize that whiplash injuries, more than any other condition or disease, have polarized health care providers and galvanized insurers into a state of permanent denial.

No other condition, with the possible exception of psychological disorders or mild brain injury, is as well scrutinized. And yet nobody questions, for example, the migraineur. Grant monies flow freely and researchers in that area need not fear being stigmatized for believing in a condition that doesn't quite exist. And yet there seems little concern that there are no objective findings in migraine.

And consider the epidemiology of whiplash. I have reported earlier that the incidence is about 770/100,000 in the U.S. And, most outcome studies tell us that from 25-40 percent or so of the victims will have long-term pain (about 10 percent will be disabled). That tells us that conservatively about 500,000 new chronic pain sufferers are added to the mix every year. And consider the fact that over 80 percent of Americans do not properly adjust their head restraints -- a task they need to do only once. It's been estimated that by simply adjusting the head restraint, injuries could be reduced by as much as 38%. Yet nobody seems to care, partly because the condition has been trivialized by those whose interests are served by portraying the injury as a benign and minor self-limiting condition.

How are we doing on the safety engineering front? The Insurance Institute for Highway Safety recently evaluated head restraints in 164 cars.<sup>1</sup> They rated the restraints for appropriate geometry, and categorized the cars as good, acceptable, marginal, and poor. The results were dismal. Only five models were given good ratings, while eight were graded as acceptable, and 117 as poor. Only one American car appeared in the acceptable category. What does this mean to the driver or passenger of these cars? It means that the risk of serious whiplash injury is increased by a factor of from 1.6 to 6 when the head restraints are poorly positioned. Not surprisingly, tall drivers are at greater risk than shorter drivers. Here's a partial list of the results:

Good

*Honda Civic Del Sol*

*Porsche 911*

*Volvo 850*

*Volvo 940*

*Volvo 960*

Acceptable

*BMW 525i*

*BMW 540i*

*Mercedes E class*

*Mercedes S class*

*Mercedes SL class*

*Mercury Villager*

*Nissan Altima*

*Saab 900*

Poor

*Acura Legend*

*Audi 90*

*Audi A6 BMW 318i*

*Buick Century*

*Buick Regal*

*Cadillac DeVille*

*Cadillac Eldorado*

*Chevrolet Astro*

*Chevrolet Camaro*

*Chevrolet Caprice*

*Chevrolet Lumina*

*Chrysler Cirrus*

*Chrysler New Yorker*

*Chrysler Town & Country*

*Dodge Avenger*

*Dodge Caravan*

*Dodge Neon*

*Dodge Viper*

*Eagle Talon*

*Ford Aerostar*

*Ford Escort*

*Ford Mustang*

*Ford Taurus*

*GMC Safari*

*Hyundai Accent*

*Infiniti G20*

*Infiniti J30*

*Jaguar XJS*

*Lexus GS/SC 300/400*

*Lincoln Continental*

*Lincoln Towncar*

*Mazda 626*

*Mercury Cougar*  
*Mitsubishi 3000 GT*  
*Nissan 300ZX*  
*Nissan Sentra*  
*Oldsmobile Cutlass Ciera*  
*Oldsmobile Ninety-Eight*  
*Pontiac Bonneville*  
*Pontiac Firebird*  
*Saab 9000*  
*Saturn SC*  
*Toyota Celica*  
*VW Cabrio*  
*VW Golf*  
*VW Jetta*

*Reference*

1. How bad are they? Restraints in 117 of 164 cars rated poor. *Accid Reconstr J* 7(5):54, 1995.

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