## Motorcycle Crash Design - Revisited Jon DelVecchio Street Skills, LLC January, 2022

Almost six years ago I gave a live presentation on motorcycle crash design. Years earlier I learned about the injury risk from our own motorcycles in forward crashes. The Honda Goldwing airbag option aside, motorcycle manufacturers have made zero effort to design their products to absorb energy and protect an operator in a crash.

In recent times, motorcycle crash avoidance electronic aids have been the clear focus of design improvements. These systems are amazing and continue to improve safety by reducing the number of crashes...we think. Annual motorcyclist fatalities still hover around 5,000 per year. It seems the electronic packages haven't been the silver bullet so many have hoped for.

In addition to crash avoidance, automobiles have <u>crashworthiness ratings</u>. I find it curious that the <u>Insurance Institute for Highway Safety</u> or motorcycle manufacturers themselves haven't yet taken on this challenge. Seeing how electronic aids like ABS, traction control and many variations have become affordable options, perhaps now is the time to examine ways to make motorcycles safer in a crash. I'm not suggesting mandates, even though improved auto crash safety is the result of regulation. I'm of the opinion that an industry such as motorcycles should get ahead of government intervention and control their own destiny.

I also view improved crashworthiness as a competitive advantage among manufacturers. I'd consider buying a motorcycle that had improved crashworthiness over one without, all else being equal between competing models. If this Covid disaster has proven anything, it's that there are a large number of motorcyclists who care deeply about their health, contrary to the wild and crazy biker stereotypes. Consider how many rallies, events and rides were cancelled or disrupted due to risk of transmitting a virus, yet nobody seems to recognize the serious health risk of their motorcycle each mile ridden.

What reminded me of my work on this subject came from two sources this week. First, the hosts of the latest <u>Highside/Lowside podcast episode</u> were asked to discuss the future of motorcycle design by someone in a live audience. I was disappointed, but not surprised, when they dodged the importance of safer crash designs and instead basically shrugged their shoulders. The second reminder came from watching a random **DanDan the Fireman** YouTube channel video where one can clearly see a crash victim smash his groin on the fuel tank. Dan directly calls out this injury and discusses it at length.

Here is a link for the <u>Motorcycle Crash Rating Tool</u> and here is a link to my YouTube presentation on the subject <u>https://www.youtube.com/watch?v=K8YjSWWdltA</u>