

PRO RIDER

# CONSIDER ALL THE FACTORS

Words: Howard Mansell

Are we blissfully ignorant of the physics of controlling a motor vehicle in New Zealand? A recent conversation on Facebook suggested so to Pro Rider's Howard Mansell...

**S**o, I had a discussion on Facebook the other day with a fellow road user who had strongly ridiculed someone's suggestion that a five-car following distance was "about right" at 50km/h on a wet road.

This chap thought that anyone suggesting such a ridiculously huge following distance must have a screw loose and was probably 80-years-old and shouldn't be driving any more anyway.

It seems this chap was totally confident that he knew how to use his brakes well enough to stop in half this distance. Of course when I suggested that he look at scientific data that proves that there are other elements to the dynamic situation – such as observation skills of the driver, reaction times of the driver, muscle response times, road surface variations, brake effectiveness, tyre compound composition variations and ageing – he came back at me with accusations that I was just making stuff up and was probably one of those "speed is the problem" focused people who want the speed limits dropped to 20km/h so that we can all be safe.

Actually, that annoyed me because I really disagree with that "speed focused simpleton" view.

## IN REALITY

The point of all this is that it really made me wonder how many drivers and riders out on the road today have so little actual knowledge about the dynamics and physics of operating the vehicles that they are using. It's truly mind-boggling how little people know or bother to try to understand.

So many riders think that because they have good braking systems and modern technology on their bikes they can out-brake a car, even though their contact surface on the road using our two round-profile tyres amounts to about two credit cards, while a car has four large flat-profile tyres, each immediately giving huge contact patches to help the braking systems.

We have riders who:

- Think it's ok to lane-split at high speeds relative to the traffic
- Think that they can defy physics by turning into corners early and end up riding the ragged edge on exits on a regular basis
- Think it's ok to let their tyres run at 12psi thereby compromising traction and braking performance hugely
- Think that a bi-annual WOF is the only safety-check that needs to be done on their bike


A riding instructor from Australia recently expounded the virtues of 'pushing the bike down' into corners (off-leaning) thereby, increasing the bike's lean angle and reducing the ground clearance, and of course, increasing the likelihood of losing traction on the road with the tyres on a much greater angle to the road

## PHYSICS RULE

A lot of drivers and riders just don't believe that there are physical laws that simply can't be ignored if everyone is to be safer on the road, and tailgating is something that highlights this.

When following too closely there just isn't time to react and apply the brakes in time. It's a law of physics. Just like if I drop an egg about a metre above the floor: it will fall, and it will almost certainly break - it's reality, accept it. If we acknowledge these things as fact, as we should, then our natural instincts start to work for us and we will start being more observant of what is happening ahead.

We should be thinking about a few what-if scenarios, like, what if that car pulls out in front of the car ahead? We will most likely start to think about leaving a bit bigger gap, just in case.



You can have the best brakes and  
tyres in the business, but you still  
can't fight the laws of physics...

Photo Pirelli

“A lot of drivers and  
riders just don't believe  
that there are physical  
laws that simply can't  
be ignored if everyone is  
to be safer on the road.”

Something my Dad taught me was to always be looking for an escape path, he was a professional driver and gave me heaps of little gems that I have always tried to put into my driving and riding practises.

Until we accept reality, we will just travel along in our dumb little world, believing that nothing can go wrong (and I can fix it if it does). Sorry, but you can't beat reality.

After a couple of attempts to get my 'friend' on Facebook to consider reading up and learning something about the realities that we should all have knowledge of, I decided to end the conversation. My last comment to him was, well obviously you know everything about everything so there's nothing left to discuss.

I hope that you get through life without killing yourself or someone else; many people do with good luck. I wish you luck and hope that you make it. Surreptitiously hoping that I may have sparked some of the other (hopefully more intelligent readers) of the above conversation to be inquisitive enough to have a read about the things that I suggested he read up on. ■■■