Safe Speeds

Whenever we ride, determining the appropriate speed is a constant concern. Speed itself is not necessarily bad, but excess speed at the wrong time can have unwanted and perhaps disastrous consequences. It is useful to examine various aspects of speed as they relate to safe riding.

There are trade-offs associated with increased speed. You may arrive at your destination a little sooner and, for some, riding fast adds to their enjoyment. Irresponsible speeding, however, is dangerous and definitely ill advised.

Defensive riding strategy involves Search, Evaluate, and Execute (SEE). You search ahead for potential hazards, evaluate the risks associated with them, and execute appropriate maneuvers to avoid them. Riding fast affects your use of this strategy and your safety in several ways.

Visually, high speed affects your perception and judgment. You try to scan the road as far as twelve seconds ahead, but the faster you go, the further out the twelve second distance becomes. You see less well because of the distance, it's more difficult to observe foreground detail flashing by, and observation in general becomes more difficult because of the fast rate at which you have to process the visual information.

Higher speeds increase the rate at which you approach potential hazards and provide less time and space to detect, evaluate, and respond to them. You travel further while reacting and applying your brakes. With each doubling of speed, your forward energy quadruples and your bike takes a much longer distance to stop. Even at typical street speeds, stopping distance almost doubles for every 10 mph increase of speed. Evasive maneuvers such as swerving and braking require more traction at higher speeds and may result in loss of control. You have less margin for error.

Increased speed affects both the probability and the severity of crashing your motorcycle. Studies show that the faster you ride, the more likely you are to crash. Moreover, because of the increased forward energy associated with speed, the impact of a high speed crash will likely result in more severe injuries. A MD DOT source notes that the impact of hitting a solid stationary object at 60 mph is equal to falling off a 10-story building.

It is said that speed itself is not always bad. It's inappropriate speed, or riding too fast for the conditions at hand, that leads to negative consequences. Conditions that warrant slower speeds may relate to the rider, the bike, the road, traffic, and other factors.

The skill and condition of the rider are important. Newer or less skilled riders should be modest with their speeds, especially on unfamiliar roads, on curvy roads, in traffic, or in other potentially hazardous situations. They should "ride their own ride" and not be tempted to increase their speed to match that of more skilled riders, especially on curves.

A rider who is impaired in any fashion should be cautious. Such impairments include slower reflexes due to age, fatigue, heat, cold, vision deficiencies, distraction, etc. It is sometimes said that it's ok to ride fast, but don't ride in a hurry. Being in a hurry is another distraction that detracts from safe riding.

The condition and capability of the bike also count. A bike with reduced traction due to tire wear or with faulty brakes may not be safe to ride at any speed, and is courting disaster at higher speeds. The available lean angle of the bike may also be a limiting factor when cornering at high speeds.

The nature of traffic and the condition of the road must be taken into account. Speed should be continually adjusted to suit changing traffic situations. Slow down for intersections and construction sites. Reduce speed to negotiate curves safely. Poor conditions such as darkness, rain, fog, sun glare or surface hazards such as potholes, broken pavement, leaves, gravel, etc. are easier to deal with at slower speeds. Ride no faster than your ability to stop within your sight distance.

On the highway, studies show that fewer accidents occur when all vehicles are moving at the same speed. Riding at the speed of the surrounding traffic, while maintaining space separation, reduces potential conflicts and is generally considered as the safest approach.

Many experienced riders prefer to ride slightly faster than the average speed. Riding significantly faster than other traffic, however, is hazardous. David L. Hough, respected author on motorcycling and safety, estimates that riding 20 mph over the average speed appears to increase the accident risk by about 300 percent. Riding slower than the average speed of traffic is not recommended. It invites tailgating, lane changing, and overtaking by following vehicles which increase the probably of a collision.

Most serious single vehicle accidents occur at curves, with speed a primary contributing factor. How does a rider determine a safe speed for a curve? A speed limit posted for that particular curve provides some guidance. What you can see of the curve's radius, surface, camber, etc. should be taken into to account.

A rider should always be able to stop within his sight distance. Therefore, keep your eye on the vanishing point of the curve as you approach it and reduce your entry speed until you would be able to stop within the length of the road that you can see while staying within your lane.

With a constant throttle, a motorcycle will slow down when leaned over in a curve. Try to set your entry speed into the curve to allow you to maintain a slightly positive throttle through the curve to keep your bike's speed constant. This provides stability. If the distance to the vanishing point appears constant as you go around a curve, your speed is appropriate. As the vanishing point recedes away from you, the curve is opening up and you can accelerate out of it as your bike straightens up.

Another approach to determining the right speed for curves is to ride at speeds at which you feel comfortable. If you find yourself having the urge to back off the throttle or to brake while in curves, your entry speeds are probably too high for your comfort. Standard advice is to go into curves slowly. You can increase speed as the curves straighten.

Inappropriate speed can be dangerous, but it is not forced on us. Fortunately, our speed, and our safety, are within our control. Be observant and always be able to stop within the roadway that you can see ahead. When confronting any hazard, the main consideration is to reduce risk. Adjusting speed is the primary way to do it. Let's ride responsibility, enjoy our rides, and be safe.

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