

Report #13 - Motorcycle Accidents and Injuries

Some quick tips on motorcycle safety:

- Ride assuming that you and your motorcycle are totally invisible to motorists.
- Leave plenty of space in front and back and to the sides from all other vehicles.
- Beware of motorists turning left in front of you at intersections.
- Never drink or take drugs and try to ride a motorcycle.
- Avoid riding at night, especially late Saturday night and early Sunday when drunken drivers may be on the road.
- Beware of taking curves that you can't see around. A parked truck or a patch of sand may be awaiting you.
- Do not give in to road rage and try to 'get even' with another rider or motorist.
- If someone is tailgating you, either speed up to open more space or pull over and let them pass.
- Take a motorcycle safety course to learn what to look for to avoid accidents.
- Wear protective clothing and a helmet.

There is no New York “No-Fault” insurance available to motorcycle riders. This means that in the event of injury in a motorcycle accident, private health



insurance must pay the bills. If the rider wins a lawsuit, these bills must usually be paid back to the health insurance carrier. If there is no health insurance available, the issue of medical bills and paying for medical care becomes complicated, indeed. Consult an experienced accident and personal injury attorney.

As a lawyer and rider who has held a motorcycle license for many years, I have some definite thoughts on this topic. But I'd like you to "cram down" some statistics about motorcycle safety, which relate to accidents and injuries, and which I find fascinating:

1. Approximately $\frac{3}{4}$ of motorcycle accidents involve collision with another vehicle; most often a passenger automobile.
2. Approximately $\frac{1}{4}$ of motorcycle accidents are single vehicle accidents involving the motorcycle colliding with the roadway or some fixed object in the environment.
3. Vehicle failure accounts for less than 3% of motorcycle accidents, and most of those are single vehicle accidents where control is lost due to a puncture flat.
4. In single vehicle accidents, motorcycle rider error is present as the cause about $\frac{2}{3}$ of the time, with the typical error being a slideout and fall due to overbraking, or running wide on a curve due to excess speed or undercornering.
5. Roadway defects (pavement ridges, potholes, etc.) are the accident cause in 2% of accidents; animal involvement causes 1% of accidents.
6. In multiple vehicle accidents, the driver of the other vehicle violates the motorcycle right-of-way and causes the accident $\frac{2}{3}$ of the time.
7. The failure of motorists to detect and recognize motorcycles in traffic is the main cause of motorcycle accidents. The driver of the other vehicle

involved in collision with the motorcycle does not see the motorcycle before the collision, or does not see the motorcycle until too late to avoid the collision.

8. Deliberate hostile action by a motorist against a motorcycle rider is a rare accident cause.

9. The most frequent accident type is the motorcycle proceeding straight and the automobile making a left turn in front of the oncoming motorcycle.

10. Intersections are the most likely place for the motorcycle accident, with the other vehicle violating the motorcycle right-of-way, and often violating traffic controls.

11. Weather is not a factor in 98% of motorcycle accidents.

12. Most motorcycle accidents involve a short trip associated with shopping, errands, friends, entertainment or recreation, and the accident is likely to happen close to the place the trip began.

13. The view of the motorcycle or other vehicle involved in an accident is limited by glare or obstructed by other vehicles in almost 1/2 of multiple vehicle accidents.

14. Visibility of the motorcycle is a critical factor in multiple vehicle accidents, and accidents are significantly reduced by the use of motorcycle headlamps (on in daylight) and the wearing of high visibility yellow, orange or bright red jackets.

15. Fuel system leaks and spills are present after 62% of motorcycle crashes. This means that there is usually a fire hazard.

16. Motorcycle riders between the ages of 16 and 24 are significantly

overrepresented in accidents; motorcycle riders between the ages of 30 and 50 are significantly underrepresented. Although the majority of accident-involved motorcycle riders are male (96%), female motorcycle riders are significantly overrepresented in accidents.

17. Motorcycle riders involved in accidents are essentially without training; 92% are self-taught or learned from family or friends. Motorcycle rider training experience reduces accident involvement and reduces injury in the event of accidents.

18. Almost 1/2 of fatal accidents show alcohol involvement.

19. Motorcycle riders in those accidents have difficulty avoiding the collision. Most riders overbrake and skid the rear wheel, and underbrake the front wheel, greatly reducing the ability to slow down and avoid the accident. The ability to countersteer and swerve are essentially absent in the presence of alcohol.

20. The typical motorcycle accident allows the motorcyclist just less than 2 seconds to avoid the collision.

21. Motorcycle modifications such as those associated with the semi-chopper or cafe racer are definitely overrepresented in accidents.

22. The likelihood of injury is extremely high in motorcycle accidents – 98% of multiple vehicle collisions and 96% of single vehicle accidents result in some kind of injury to the motorcycle rider; 45% result in more than a minor injury.

23. Half of the injuries to motorcycle riders are to the ankle-foot, lower leg, knee, and thigh-upper leg.

24. Crash bars are not an effective injury countermeasure; the reduction of

injury to the ankle-foot is balanced by increase of injury to the thigh-upper leg, knee, and lower leg.

25. The use of heavy boots, jacket, gloves, etc., is effective in preventing or reducing abrasions and lacerations, which are frequent but rarely severe injuries.

26. Injury severity increases with speed, alcohol involvement and motorcycle size.

27. Seventy-three percent of accident-involved motorcycle riders use no eye protection, and it is likely that the wind on their unprotected eyes contributes to impairment of vision which delays hazard detection.

28. Approximately 50% of the motorcycle riders in traffic use safety helmets but only 40% wear helmets at the time of their accident.

29. Voluntary safety helmet use by accident-involved motorcycle riders was lowest for untrained, uneducated, young motorcycle riders on hot days and short trips.

30. The most deadly injuries to motorcycle accident victims are injuries to the chest and head.

31. The use of the safety helmet is the single critical factor in the prevention or reduction of head injury.

32. Safety helmet use does not decrease the rider's ability to hear or see, and causes no fatigue or loss of attention; no element of accident causation is related to helmet use.

33. Helmeted riders and passengers showed significantly lower head and neck injury for all types of injury, at all levels of injury severity.



34. The increased coverage of the full facial coverage helmet increases protection, and significantly reduces face injuries.

35. There is no increase in neck injury by wearing a safety helmet; helmeted riders have fewer neck injuries than unhelmeted riders.