



Naval Safety Center

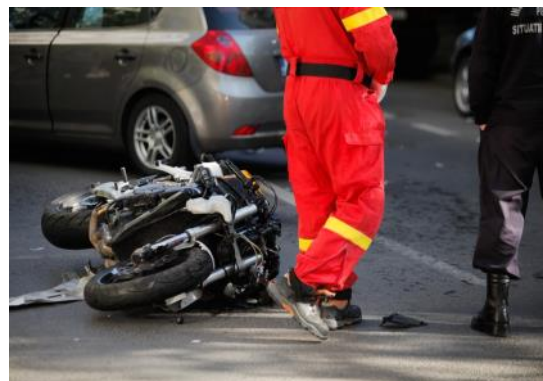
LESSONS LEARNED



LL 21-15

MOTORCYCLE MISHAPS

It's time to talk about one of the leading causes of off-duty Navy and Marine Corps fatalities each year — motorcycle accidents. We promote motorcycle safety with presentations, social media posts, articles, and Rider-Down reports, yet we continue to lose Sailors and Marines in fatal motorcycle crashes. This lesson aims to further spread the word that motorcycle riders carry a higher risk, requiring hand-eye coordination, balance, and reflexes (*and let's not leave out PPE*). Most of those factors can be managed ... IF you take the training. As we head into the 101 critical days of summer, which begins on Memorial Day weekend, we've already lost 17 service members in motorcycle accidents as of 25 May, and FY-21 has a way to go. — *Not a motorcycle rider? Check out LL 18-18, "Why We Don't See Motorcycles," to help you keep our riders safe on the road.*



We won't flood you with bar graphs to make our point; the numbers alone tell the story. The Department of the Navy (DON) averaged 17 PMV2 mishaps per month so far this FY. While this is down from the average of 26 per month last FY, the fatal mishaps have taken an unfavorable uptick. DON recorded 17 fatal motorcycle crashes so far this FY; compared to 10 at this same time in FY-20; a 70% increase. The following examples need little or no commentary. We've bolded some key points, but the stories and tragic results say enough. Please read and share with your fellow riders.

- A service member was riding a motorcycle **and hit a pothole**, causing him to flip over the handlebars and fall to the ground. He was taken to the local hospital, where he was diagnosed with a fractured sternum and paralysis from the chest down. The service member was transferred to a spinal center and later classified with a permanent, total disability. **He was wearing all required PPE, but did not complete the mandated Basic Rider Course (BRC).**
- A service member was riding his motorcycle traveling southbound on the highway when witnesses reportedly observed him cross two lanes toward an off-ramp, then swerve back into traffic lanes to avoid striking a bus entering the highway. **The service member lost control of the motorcycle** and slid under the rear wheels of a semi-tractor trailer. Highway patrol officers responded to the scene and confirmed death due to fatal head trauma. The service member was wearing all the appropriate personal protective equipment (PPE) at the time of the mishap.
- A service member was returning from a 72-hour special liberty. He had a 165-mile trip and was expected to report for duty at 1530. At approximately 1320, he struck the back of a tractor/trailer truck. He was pronounced dead at the scene by paramedics. The police report indicates that **the service member was traveling nearly 30 mph over the speed limit.**
- A service member was traveling on his motorcycle on surface streets. He accelerated his motorcycle, and, in doing so, the front wheel lost contact with the pavement (*a wheelie, whether intentional or not*). He put both wheels back on the road, but lost control, fell, and slid across the road with the motorcycle. He struck a curb, lost contact with his bike, and his body impacted a concrete sign. The service member suffered blunt force trauma injuries which resulted in his death. From the report, "**service member loses control of motorcycle after performing a vertical maneuver.**"

- A service member was fatally injured when his motorcycle veered off a boulevard, slamming head-on into a light pole. The member died at the scene of multiple injuries. The medical examiner reported that **the service member had a blood alcohol content of .170, twice the legal limit.** The local sheriff's office accident report noted **the member was not wearing a helmet.**
- A service member and a friend decided to go to the apartment complex swimming pool. They left their apartment and got on a motorcycle, only wearing t-shirts, swim trunks, and sneakers to travel to the pool approximately 1/10th of a mile away. When adjacent to the pool area, the motorcycle struck the back of a car, ejecting both riders. The service member (operator) crashed through the rear window of the vehicle and hit the roof. The report indicates **the motorcycle was traveling about 70 mph, and the car's speed was 10 mph.** The service member was killed due to closed head and chest trauma.
- **A service member was lane splitting** when a car changed lanes and sideswiped the service member on his motorcycle. When the car driver noticed the service member lane splitting, they tried to move away, but his foot-peg caught on the car's wheel well, pulling the service member to the road's shoulder. Thankfully, the service member only received a fractured middle finger requiring five stitches. Lane splitting only increases your risk, and it is specifically illegal in most states — for good reasons.¹



- Our final narrative shows that you can still significantly reduce your risk of injury if you do everything right and another driver doesn't. A service member was riding on the highway at approximately 40 mph in the center of three lanes, when the car to his right put their left turn signal on and started to merge left (over a double solid line). The service member immediately applied both brakes and started moving left, but there was another car there. The merging vehicle hit the back right portion of his bike, which pushed him into the car to his left. The bike toppled, and he was thrown off to the asphalt in front of the bike.

According to the service member's statement, "A nice girl came and sat next to me and held my hand and talked to me until the paramedics arrived." According to the report, that's apparently all the treatment he needed because **he was traveling at a safe speed, wearing all his PPE, and had completed the required Riders Course.**

Key Takeaways/Lessons Learned

1. Train like you perform, just like on the job. Motorcycle riding requires significantly more skill than driving a car; that's why specific rider courses are available (*and required for Sailors and Marines*). There are also courses for experienced riders to improve their riding safety and awareness of their riding behaviors. Most states require you to pass a road test in addition to a written test to receive a motorcycle endorsement. That endorsement doesn't make you a highly skilled rider, so new riders should start off easy and ride within your skill level (*you don't get a do-over like in a video game*).
2. Speed kills, literally. In many motorcycle accidents, including some described in this lesson learned, excessive speed was a contributing factor. Whether approaching an off-ramp too fast, or traveling much faster than the traffic flow, your reaction time significantly decreases. And the faster you hit something, the more it'll hurt you. Slow it down.
3. Control yourself and your machine. If you heed takeaways 1 and 2, this should be a lot easier. Loss of control is a major causal factor in motorcycle mishaps. Sometimes the causes are speed-induced, and sometimes it's riding outside of one's skill level. Traffic, road conditions, weather, time of day, and, again, your skill level, all contribute to the level of risk you assume on your ride.
4. Don't drink and ride. Adding to the list of things not to drink and do, we see alcohol as a factor in motorcycle accidents all too often. Don't do it ... period.

And remember ... "Let's be careful out there"

This product is posted on the NAVSAFECEN public site at <https://www.navalafetycenter.mil>

Send feedback to: NAVSAFECEN_CODE522_LESSONS_LEARNED@navy.mil

¹Lane splitting is only explicitly legal in California, and is "at the discretion of law enforcement" in about a dozen more states. Know your laws ... and be smart. Just because it's legal doesn't mean it's a good idea.