

JULY 2025

Are We Blind to Motorcycle Riders and Pedestrians? -

The Visibility Crisis on Our Roads

By Juan Aguilar

Accurately reporting individuals' ages is essential for identifying at-risk demographics; however, 23% of crash reports in July still lack this information, hindering our ability to thoroughly analyze age-related trends. Despite this fact, younger and lower-ranking riders still represented a higher percentage of accidents during this reporting period: 48% of crashes involved riders 25 years old and under and 71% involved ranks E-5 or below.

In July, the naval enterprise recorded 31 motorcycle crashes, with two resulting in fatalities. Due to favorable riding conditions, California led in motorcycle crashes for the 18th continuous month with 11 reported – accounting for over a third of the crashes (35%) overall. Florida followed with five reported or 16% of the incidents. North Carolina and Virginia each had three crashes (20%). The remaining incidents occurred throughout the United States as well as one crash each in Bahrain, Italy, Japan and Spain.

The increasing number of crashes involving pedestrians and motorcycle riders highlights a disturbing trend: drivers are failing to see these vulnerable road users. While vehicle design contributes to this problem, the issue extends far beyond physical obstructions. such as blind spots. Cognitive and behavioral factors play a significant and often overlooked role in the growing "invisibility" of pedestrians and motorcycle riders. Recent research by the Insurance Institute for Highway Safety (IIHS) underscores the expanding size of A-pillar blind zones - areas obscured by the thick supports framing the windshield - particularly in newer SUVs. While this is a serious concern, it represents just one piece of a larger, more complex puzzle. Addressing this visibility issue requires a multifaceted approach encompassing vehicle design improvements, targeted driver education and integrating advanced safety technologies.

The fact various cognitive and behavioral factors are involved creates a dangerous environment for vulnerable road users.

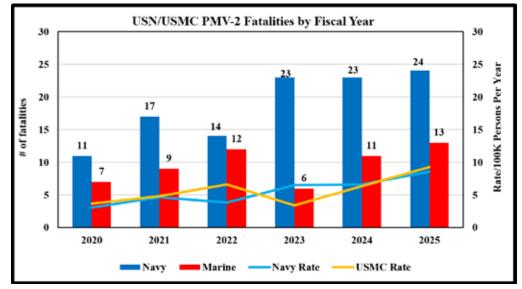


Figure 1 depicts Navy and Marine Corps' reported motorcycle fatalities by fiscal year. The numbers reflect the entire fiscal year for FY20-FY24; FY25 data is current to the end of the reporting month (July).

At a Glance

USN

Rider fatalities this report: 1 Rider fatalities for FY 25: 24

USMC

Rider fatalities this report: 1 Rider fatalities for FY 25: 13

Totals this report
Non-fatal crashes: 29
Fatalities: 2

Inattentional blindness, often fueled by distractions such as navigation systems, cell phones or even daydreaming, causes drivers to overlook pedestrians and motorcycle riders, even when they can be seen clearly. Our brains, when overloaded with information, prioritize certain stimuli while filtering out others. In the context of driving, a distracted driver may prioritize traffic flow and navigation, unconsciously filtering out less-expected elements such as pedestrians or motorcycle riders, especially in environments where their presence isn't anticipated. This is further compounded by confirmation bias, a cognitive shortcut where drivers focus on what they expect to see on the road, primarily other vehicles. This can lead them to overlook smaller, less anticipated road users, effectively "filling in the gaps" and dismissing information not conforming to their established expectations. The inherent vulnerability of pedestrians and motorcycle riders, who occupy less visual space and can be easily obscured by other vehicles, exacerbates this bias.

The phenomenon of look-but-fail-to-see errors further complicates the issue. Even when a driver's eyes physically pass over a pedestrian or motorcycle rider, their brain might fail to register their presence. This can be attributed to several factors, including fatigue, stress and the complexity of the

Visibility Crisis—

driving environment. When drivers are tired or overwhelmed, their cognitive processing slows down, making it less likely for them to interpret visual information accurately. In these instances, even though the eyes may have technically "seen" the pedestrian or motorcycle rider, the brain fails to process and interpret the information quickly enough to avoid a collision. This disconnect between visual input and cognitive recognition can have devastating consequences.

Furthermore, a lack of expectancy also plays a role. Drivers are generally conditioned to look for larger vehicles - cars, trucks and buses - as these are the most common objects encountered on the road. This expectation, coupled with the relative infrequency of encountering pedestrians and motorcycle riders in specific driving contexts, can lead to a failure to actively search for them. Drivers may subconsciously prioritize larger vehicles, assuming anything smaller will be less of a threat or less likely to be present. This lack of proactive scanning and anticipation makes pedestrians and motorcycle riders effectively invisible, even when they are within the driver's field of vision.

While improvements in vehicle design, such as thinner A-pillars, strategically placed mirrors and improved overall visibility are crucial, they are only one piece of the puzzle. Addressing the cognitive and behavioral aspects is equally vital. This includes raising public awareness about the importance of attentiveness and actively scanning for vulnerable road users, incorporating targeted training modules into driver education programs to mitigate inattentional blindness and confirmation bias, and promoting the adoption of advanced safety technologies, such as pedestrian detection systems and automatic braking.

These systems act as a safety net when human perception fails, providing an additional layer of protection for vulnerable road users. Only through a comprehensive and multi-pronged approach tackling all facets of this issue – from vehicle design to driver behavior – can we hope to create safe roads for everyone, ensuring pedestrians and motorcycle riders are seen and protected.

(continued from page 1)

For more details on vehicle blind zones, read the article, "New IIHS measurement technique points to growth in vehicle blind zones," at https://www.iihs.org/news/detail/new-iihs-measurement-technique-points-to-growth-in-vehicle-blind-zones

It's crucial to pay attention to the factors behind July's motorcycle crashes and understand detailed and accurate reports help ensure the data collected reflects the actual circumstances of each incident. Comprehensive data allows for identifying patterns and trends, such as common causes, locations or times of day when crashes occur. These statistics emphasize the critical importance of motorcycle safety awareness and proactive measures to prevent future tragedies.

"This lack of proactive scanning and anticipation makes pedestrians and motorcycle riders effectively invisible, even when they are within the driver's field of vision."

Amidst the critical mission of ensuring operational readiness, the efforts of motorcycle safety representatives (MSR), supervisors and collateral duty safety officers persist in keeping your personnel current with their training and licensing. The *Rider Down* reports are indispensable tools in your arsenal, integral to safety and training briefs. Their insights and analysis are invaluable in understanding the factors contributing to crashes and formulating preventive measures.

To those with Risk Management Information (RMI) access, we've integrated the *Rider Down* reports within RMI. Once logged into RMI, click on the left-hand tab under "Pubs and Refs" homepage and proceed to "Motorcycle Rubber Side Down" to subscribe to and view these publications. The site contains the

By the numbers

- 14 (48%) crashes involved colliding with a moving vehicle.
- 9 (29%) crashes involved a rollover/overturn.
- 3 (10%) crashes involved colliding with an animal or object.
- 2 (6%) crashes had a rider that ran off the road.
- 2 (6%) crashes had no information reported.

By the clock

- Midnight 3:59 a.m. 1 (3%)
- 4 a.m.-7:59 a.m. 3 (10%)
- 8 a.m. 11:59 a.m. 2 (6%)
- noon 3:59 p.m. 13 (42%)
- 4 p.m. 7:59 p.m. 8 (26%)
- 8 p.m. 11:59 p.m. 4 (13%)

By the day

Weekdays - 16 (52%) Weekend - 15 (48%)

current year motorcycle publications produced for Navy and Marine Corps MSRs, riders and safety professionals.

More information, videos and archived newsletters can be found on the Naval Safety Command website: https://navalsafety command.navy.mil/Media/Mags-Pubs/Motorcycle-Rider-Down-Reports-Newsletters/.

In the pursuit of safety, every detail matters. Do not ignore even the minor factors, as this raises your risk and may result in a collision. Factors provided from the crashes on the following pages are based on the information presented in the operations reports and the investigator's reports, most of which are still under investigation. Remove one factor and the crash may not have occurred.

Editor's note: Low speed vehicles, neighborhood electric vehicles, mopeds and scooters are considered motor vehicles when operated on the highways, per OPNAV M-5100.23 (Series).

Rider Down



Rider Down is a monthly update of motorcycle crashes that occurred throughout the U.S. Navy and Marine Corps. The data in this publication reflects what was reported during the time period covered. Information contained in the report is based on preliminary data and is provided for hazard

awareness and training purposes only. The Naval Safety Command recommends Motorcycle Safety Representatives use this information for training and mentorship programs and forward to others who may have an interest.

Crash data can be obtained from Naval Safety Command.





Motorcycle Crash Legend

NR represents information not reported Red entries represent Marine Corps-specific mishaps (All times local)

Fatal Crashes

July 2, 1:04 p.m., age NR E-3

Location: Kailua, Hawaii

Remarks: Rider was involved in a fatal motorcycle crash.

July 7, 9:30 p.m., 23-year-old E-4

Location: San Diego, California

Remarks: Rider was involved in a fatal motorcycle crash. The

rider completed BRC in March 2025.

Nonfatal Crashes

July 3, 7:30 a.m., age NR E-7

Location: Joshua Tree, California

Remarks: Rider lost control of motorcycle and fell, sustaining a minor fracture to the right arm; discharged from hospital with a splint.

July 3, 5:25 p.m., 34-year-old E-5

Location: San Diego, California

Remarks: Rider collided with a moving vehicle making an abrupt lane change into his lane. The rider sustained bruising to the right knee and ankle.

July 3, 7 p.m., 20-year-old E-2

Location: Port Orchard, Washington

Remarks: Rider was involved in a single motorcycle crash, sliding approximately 80 feet and injuring their wrist. The rider was transported to hospital by ambulance and subsequently released to their supervisor. The motorcycle was a Yamaha MT-09 and the rider was wearing full PPE. The rider possessed a valid motorcycle license and completed BRC in April 2025.

July 3, 10:45 p.m., 21-year-old E-3

Location: Yucca Valley, California

Remarks: Riders were returning to base after a night out, with P2 riding second in the formation. Due to road curves and spacing, P3 lost direct sight of P2 and later found P1 waiting at the road's end. P3 finally found P2 and his motorcycle about half a mile away. P2 was hospitalized with multiple fractures and internal injuries and has no memory of the incident.

July 4, 3 p.m., 27-year-old E-5

Location: Fernley, Nevada

Remarks: Rider and passenger were riding when the motorcycle came to a stop and tipped to one side. As a result, SVM's legs touched the hot exhaust muffler, causing burns. SVM was transported to the

emergency room for evaluation, treatment and bandaging, and was discharged. A follow-up evaluation was conducted by base medical personnel, who placed the SVM on LLD for 14 days.

July 4, 4 p.m., 38-year-old 0-3

Location: San Diego, California

Remarks: Rider was struck by a vehicle during a lane change. This crash resulted in multiple broken bones requiring surgery and subsequent lost workdays.

July 4, 6:35 p.m., age and rank NR

Location: Bahrain

Remarks: Rider was stopped on the highway due to heavy traffic. A vehicle traveling behind failed to stop in time and collided with the rear bumper of the SVM's motorcycle, causing damage. The collision was caused by the following vehicle's failure to maintain a safe following distance and inability to stop in time due to traffic conditions.

July 5, 1 p.m., 29-year-old E-4

Location: Jacksonville, Florida

Remarks: Rider encountered debris impacting the front tire of their motorcycle while changing lanes. This caused the motorcycle to wobble and lose control, resulting in a single-vehicle crash. The rider sustained multiple abrasions and received 72 hours SIQ and 10 days LLD.

July 5, 2:30 p.m., 20-year-old E-3

Location: La Jolla, California

Remarks: Rider was traveling through a neighborhood at approximately 30 mph when a car made a U-turn in front of them. The rider struck the vehicle and went over his handlebars and the car's hood. Emergency services transported the rider to the emergency room where medical evaluation revealed a compressed fracture on the T-10 vertebra and a sprained ankle. The rider was instructed to follow up with the medical team aboard their assigned ship. The motorcycle involved was a Suzuki GSXR 750 and the rider was wearing full PPE, including a helmet, gloves, boots and a jacket. Although the rider completed BRC in October 2024, they did not have a valid motorcycle license or permit at the time of the incident.

Acronyms

ARC: Advanced Rider Course

BRC: Basic Rider Course

LLD: light & limited duty

NR: not reported

PMV-2: private motor vehicle-2 wheels

(motorcycle)

PMV-4: private motor vehicle-4 wheels

(automobile)

PPE: personal protective equipment

SIQ: sick in quarters **SVM:** service member

CRASH REPORTS

July 6, 2:30 p.m., 20-year-old E-2

Location: San Diego, California

Remarks: Rider was traveling at the posted speed limit on a local road when a compact SUV merged abruptly from a parking area without signaling or checking for traffic. The rider attempted to avoid the collision but struck the SUV driver's side, was thrown over the vehicle and landed on the ground. The rider sustained a vertebrae compression fracture and a sprained ankle, was treated at a medical facility and placed on limited duty pending specialist clearance.

July 9, 7 p.m., 24-year-old E-1

Location: Gulf Breeze, Florida

Remarks: Rider collided with an SUV making a left-hand turn in front of them, impacting the vehicle's rear passenger side. Rider was found unresponsive at the scene and transported to a trauma center, later regaining consciousness with limited memory of the incident. Rider was treated for a neck injury, discharged the same evening and later placed on limited duty following medical evaluations. Authorities determined the other driver was under the influence of alcohol.

July 10, time NR, 22-year-old E-4

Location: James City, North Carolina

Remarks: Rider departed their residence after a full day of work around 1610. While navigating through a neighborhood using GPS directions, heavy rain obscured rider's vision at a stop sign. While making a right turn to re-enter the highway, the rider was sideswiped by oncoming traffic and thrown onto the shoulder. He sustained a deep laceration to the left calf, believed to be caused by impact with a truck's stepplatform. Emergency services transported the rider to hospital, where

they received stitches; X-rays and a CT scan were normal. He was treated and released on the same day and placed on 30 days LLD.

July 10, 8 p.m., 24-year-old E-5

Location: Pensacola, Florida

Remarks: Rider was departing a restaurant parking lot for a group motorcycle ride when they lost control of their motorcycle after hitting a patch of sand at low speed (under 20 mph). The motorcycle tipped over, resulting in a fractured right leg. The rider was transported to hospital by ambulance and underwent surgery to reset the leg.

July 12, 2:30 p.m., 19-year-old E-3

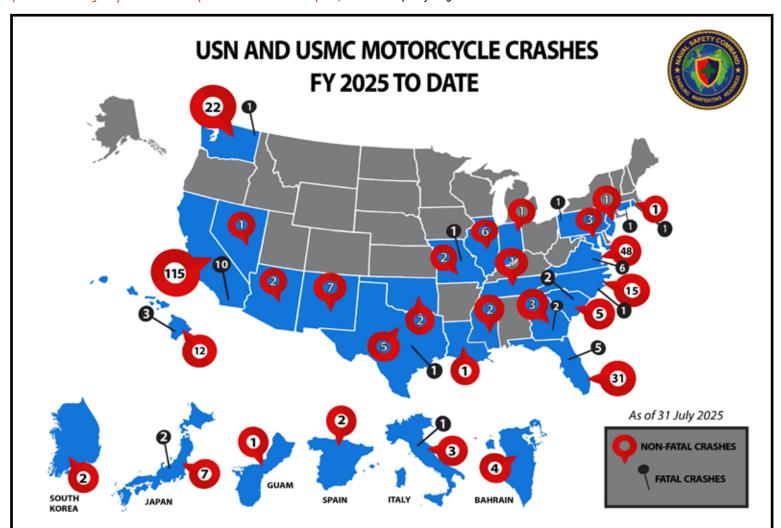
Location: Emerald Isle, North Carolina

Remarks: Rider was following behind a vehicle moving at inconsistent speeds. As the lead vehicle suddenly accelerated, the rider did the same to match the posted speed limit. When the vehicle in front abruptly stopped, the rider over-applied the front brake, flipping over the handlebars and hitting the ground. Emergency services were called and transported the rider to the emergency room, where a broken collarbone was diagnosed. A follow-up appointment revealed an additional fracture to the left arm. The rider was scheduled for surgery and placed on 14 days convalescent leave.

July 12, 3 p.m., 24-year-old E-4

Location: Naples, Italy

Remarks: The SVM was riding as a passenger on a motorcycle when a car abruptly cut into the lane, causing the rider to stop suddenly. The passenger fell off the motorcycle, resulting in a dislocation of the right pinky finger and additional abrasions.





July 13, 1:20 p.m., 20-year-old E-3

Location: Chesapeake, Virginia

Remarks: Rider lost control of their motorcycle while navigating a corner and slid into a ditch, resulting in two broken ribs. No other vehicles were involved. Emergency services arrived and the rider was transported by ambulance to hospital.

July 14, 3:30 p.m., 26-year-old E-6

Location: San Diego, California

Remarks: Rider was struck from behind, causing a loss of control. The rider briefly lost consciousness and sustained minor injuries. MRI and CT scans confirmed no fractures. The rider was wearing proper PPE at the time of the incident and completed required training as of July 2025.

July 15, 3:33 p.m., age NR E-5

Location: Great Mills, Maryland

Remarks: Rider was traveling to work on a motorcycle when a van failed to yield the right of way, resulting in a collision. Medical assistance was initially provided by a passing motorist and another SVM until emergency medical services arrived. The rider was transported to a regional medical center. The rider was wearing proper PPE at the time of the incident and completed BRC as of July 2025.

July 15, 7:30 p.m., 19-year-old E-3

Location: Jacksonville, Florida

Remarks: Rider was riding his motorcycle on a local roadway when they had to lay the bike down to avoid a preceding vehicle that braked abruptly. The rider was taken to an emergency room for treatment and was released the same day with a sprained thumb.

July 17, 11:11 p.m., 21-year-old E-3

Location: Jacksonville, Florida

Remarks: Rider was riding with a friend from a different command. As they traveled on a major interstate under an overpass at a high rate of speed, the rider rear-ended a van and went through its rear window. Law enforcement and emergency medical personnel responded to the scene and transported the rider to hospital. The rider sustained brain bleeding, a bruised right lung and several injuries to extremities, and is expected to make a full recovery.

July 17, 3:45 p.m., age rank NR

Location: Albuquerque, New Mexico

Remarks: While operating their motorcycle the rider was struck by a semi truck, sustaining multiple injuries including a broken finger; no further information was reported.

July 18, 2 p.m., 27-year-old E-6

Location: Ocotillo, California

Remarks: Rider experienced a sensation in their leg while operating their motorcycle, so they extended their leg which contacted the

roadway. Later that evening, the rider sought care at an emergency room due to increasing toe pain and was diagnosed with a fractured toe. The rider followed up with base medical and was placed on a seven-day restricted duty status, with a follow-up appointment scheduled for reassessment.

July 19, 8:30 a.m., 39-year-old E-7

Location: Surry, Virginia

Remarks: Rider collided with a vehicle. The rider was treated at an emergency room for a broken collarbone and two fractured neck vertebrae: no further information was reported.

July 19, 5 p.m., 28-year-old E-6

Location: Maple Hill, North Carolina

Remarks: Rider was struck head-on by a vehicle, sustained multiple injuries and was life-flighted to hospital in critical condition.

July 20, 4:40 a.m., age NR E-1

Location: Okinawa, Japan

Remarks: The rider was driving along the seawall and lost control of the motorcycle due to poor road conditions, striking a light pole. The rider was transported to a medical facility for treatment.

July 23, 6:50 a.m., 37-year-old E-7

Location: Norfolk, Virginia

Remarks: Rider was involved in a motorcycle crash while merging and collided with the rear of a slower vehicle. The rider did not notice the vehicle ahead until it was impacted. Rider was transported by ambulance to hospital for injuries.

July 24, 2:07 p.m., 21-year-old E-5

Location: San Diego, California

Remarks: Rider was cut off by another vehicle. The brakes locked and the rider dumped the motorcycle. Rider was evaluated at an emergency room for sustained injuries, including a shoulder fracture. The rider completed BRC, was wearing all required PPE, is endorsed by the state and has ARC scheduled for August 2025.

July 26, 9 a.m., age NR E-3

Location: San Diego, California

Remarks: Rider sustained multiple internal organ lacerations, a fractured wrist and lower leg injuries in a motorcycle crash. They are currently in intensive care at a regional medical center. No other details were reported.

July 27, 1:30 a.m., 22-year-old E-4

Location: Jerez de la Frontera, Spain

Remarks: Rider was involved in an off-base motorcycle crash resulting in injuries requiring inpatient medical care. The rider received treatment at a hospital in Spain and remains under medical supervision.



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