

New cars are supposed to be getting safer. So why are fatalities on the rise?

September 26 2023, by Travis Loller



Alyssa Milligan participates in the Bike Ride Across Wilson County in conjunction with the Tennessee State Fair, Aug. 19, 2023, in Tenn. Milligan was struck and killed by a pickup truck in September while riding with a friend. Roadway deaths in the U.S. are mounting despite government test data showing vehicles have been getting safer. While the number of all car-related fatalities has trended upward over the last decade, pedestrians and cyclists have seen the sharpest rise, 64% between 2011 and 2022. Credit: Ronald E. VanHoose via AP



Alyssa Milligan was someone who intuitively knew when another person needed help, encouragement or a kind word. Although she was new to Tennessee, the 23-year old physical therapy student, whose mother called her "Sweet Alyssa," had already made many close connections, especially within the tight-knit cycling community around Nashville—before she was killed this month, struck by a pickup truck while cycling with a friend.

Roadway deaths in the U.S. are mounting despite government test data showing vehicles have been getting safer. While the number of all carrelated fatalities has <u>trended upward over the last decade</u>, pedestrians and cyclists have seen the sharpest rise: over 60% between 2011 and 2022.

It coincides with a steep increase in sales of SUVs, pickup trucks and vans, which accounted for 78% of new U.S. vehicle sales in 2022, according to Motorintelligence.com.

Current U.S. ratings only consider the safety of the people inside the vehicle. The National Association of City Transportation Officials is leading an effort asking U.S. transportation officials to begin factoring the safety of those outside of vehicles into their 5-star safety ratings.

"We don't know exactly what's going on with the increase in pedestrian fatalities. It certainly seems like the increase in bigger vehicles is contributing to it," said Jessica Cicchino, vice president of research at the nonprofit Insurance Institute for Highway Safety.

"Many studies have shown that larger vehicles like SUVs and pickups are more likely to kill or seriously injure <u>pedestrians</u> and <u>cyclists</u> when they're involved in a <u>crash</u>," she said, noting that large vehicles are more likely to strike people in the head and vital organs, rather than the legs.





A sticker is seen on a bike helmet commemorating the life of Alyssa Milligan, Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan was struck and killed by a pickup truck while cycling with a friend the previous week. A group of cyclists gathered to remember Alyssa Milligan for a memorial ride in her honor. Credit: AP Photo/George Walker IV

The design of these vehicles can also pose visibility problems. An Insurance Institute for Highway Safety study of crashes with pedestrians at intersections found that the vehicles most likely to be involved in left-turn crashes were SUVs and pickups, suggesting "they might be having a harder time seeing some of those pedestrians," Cicchino said.

Subaru, which has performed well in IIHS pedestrian crash avoidance



tests, considers visibility its first line of safety, according to spokesperson Todd Hill. But that has become more challenging as safety standards for rollovers have required vehicles to improve the strength of the pillars that support the roof.

"The smaller the glass you make, the more design flexibility you have ... but it really comes at the sacrifice of outward visibility," he said.



Kim Milligan, center, listens as a group of cyclists gather to remember her daughter, Alyssa Milligan, before a memorial ride in her honor Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan's daughter was struck and killed by a pickup truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV



While there has been less research on blind spots directly in front of passenger vehicles, Consumer Reports found in 2021 that high hoods obstructed driver views of pedestrians. Meanwhile, a January 2023 report from the U.S. Department of Transportation's Volpe Center determined "the increasingly large blind zones in SUVs and pickups have been associated with fatal 'frontover' crashes," where people are run over by slow-moving vehicles.

The Volpe Center, which works to address the nation's most pressing transportation challenges, recently collaborated to produce a web application called VIEW, which uses crowd-sourcing to create a database of vehicle blind zones. For example, the app shows that as many as eight elementary school children could stand shoulder-to-shoulder in front of a 2016 Chevrolet Silverado without being visible to the driver.

The U.S. first began crash testing cars in the 1970s, and it implemented the 5-star rating system in 1993. In 2006, the National Highway Traffic Safety Administration began requiring window labels on new vehicles to include those ratings.





Steve Milligan, center, listens as a group of cyclists gather to remember his daughter, Alyssa, before a memorial ride in her honor Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan's daughter was struck and killed by a pickup truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV

Thanks to vehicle improvements, seatbelt laws and other changes, <u>fatal</u> <u>crashes</u> in the U.S. trended downward for decades, hitting a low of 29,867 in 2011. But that trend has reversed. Government estimates of fatal crashes in 2022 show a 43% increase to 42,795—partially thanks to increases in speeding and drunk driving and decreases in seatbelt use. Fatal crashes also increased as a percent of total miles driven. Pedestrian and cyclist deaths increased by 64% since 2011, to an estimated 8,413 in 2022.



NHTSA has proposed <u>new pedestrian crash avoidance tests</u>, but they would be voluntary and not part of the agency's 5-star rating system, said Billy Richling, a spokesperson at the National Association of City Transportation Officials, which is pushing to make pedestrian safety testing mandatory.

"A vehicle could fail the pedestrian crash-worthiness test and still receive five stars," he said.



Cyclists ride during a memorial to remember Alyssa Milligan, Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan was struck and killed by a pickup truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV



A voluntary evaluation isn't enough for Jessica Hart, whose 5-year-old daughter Allie was struck and killed in their Washington, D.C., neighborhood in 2021. Her petition on Change.org, which demands the NHTSA include a vehicle's risk of killing a pedestrian in its 5-star rating system, has collected more than 28,000 signatures.

"She had just started kindergarten," Hart said of her daughter. "She was riding her bike in the crosswalk, a block from our house in the school zone. She was with her dad. And a Ford Transit van came up to the 4-way intersection, and didn't see her, and just proceeded through the stop sign, and hit and killed her."

John Capp, the director of vehicle safety technology, strategy and regulation at General Motors, stressed that there is not enough data about pedestrian traffic deaths to understand the causes. He also acknowledged there are tradeoffs in design and said safety emphasis in the past has been on the people inside of vehicles.





Steve Milligan, left, and cyclist Paul Trice remember Milligan's daughter, Alyssa, before a memorial ride in her honor Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan's daughter was struck and killed by a pickup truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV

"Ultimately, there's less we can do when someone is hit outside a vehicle," he said. "That's why we're focused on pedestrian crash avoidance."

Nearly all new GM vehicles come equipped with automatic emergency braking, and cameras are getting better at seeing pedestrians at night, when the majority of those fatal crashes occur.

That is in line with an NHTSA proposal that would require new cars and



light trucks to have automatic emergency braking able to detect pedestrians, including at night, within three years.

Advances in that technology promise to help compensate for blind spots, but <u>safety</u> experts say it is only part of a solution that requires infrastructure changes, speed limit enforcement and even changes to <u>vehicle</u> design.

"You want to be getting it from all angles," Cicchino said. "You want to prevent the crashes from occurring, but when the crashes occur, you want them to be less dangerous."



Kim Milligan, center, listens as a group of cyclists gather to remember her daughter, Alyssa, before a memorial ride in her honor Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan's daughter was struck and killed by a pickup



truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV



Kim Milligan, left, hugs cyclist David Burka before a memorial ride in honor of her daughter, Alyssa, Tuesday, Sept. 12, 2023, in Mount Juliet, Tenn. Milligan's daughter was struck and killed by a pickup truck while cycling with a friend the previous week. Credit: AP Photo/George Walker IV





A roadside memorial for cyclist Alyssa Milligan is seen along state Highway 100 near Percy Warner Park, Friday, Sept. 15, 2023, in Nashville, Tenn. Milligan was struck and killed by a pickup truck near the site while riding with a friend the previous week. Credit: AP Photo/George Walker IV







A roadside memorial for cyclist Alyssa Milligan is seen along state Highway 100 near Percy Warner Park, Friday, Sept. 15, 2023, in Nashville, Tenn. Milligan was struck and killed by a pickup truck near the site while riding with a friend the previous week. Credit: AP Photo/George Walker IV



A vehicle drives past a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Jessica Riester Hart holds a photo of her daughter, 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near their home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Jessica Riester Hart sits on her daughter's bed as she holds a photo of her daughter, 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near their home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Jessica Riester Hart stands near a sweetgum tree in her yard that her daughter Allie liked to climb as she holds a photo of her daughter, Thursday, Sept. 14, 2023, in Washington. 5-year-old Allie Hart was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near their home. Credit: AP Photo/Mark Schiefelbein





Jessica Riester Hart holds a jewelry box decorated by her daughter, 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near their home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





A vehicle drives past a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Photos of Allie Hart, a 5-year-old girl who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near her home, line a shelf at her family's home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Jessica Riester Hart holds a jewelry box filled with rocks collected by her daughter, 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near their home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





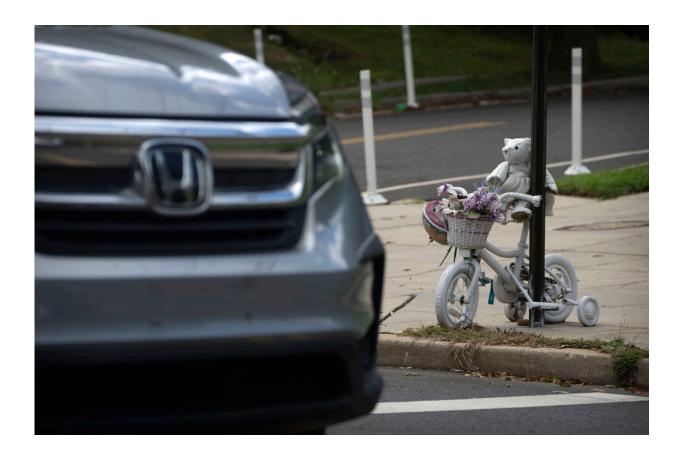
A bicycle painted white serves as a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





Photos of Allie Hart, a 5-year-old girl who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk near her home, line a shelf at her family's home, Thursday, Sept. 14, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





A vehicle drives past a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





A vehicle drives past a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





A sign is mounted to a pole near an intersection where 5-year-old Allie Hart was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, as seen Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein





A vehicle drives past toys left at a memorial for 5-year-old Allie Hart, who was struck and killed in 2021 by a driver while riding her bicycle in a crosswalk, Monday, Sept. 11, 2023, in Washington. Credit: AP Photo/Mark Schiefelbein

Hart is now an advocate with the Washington chapter of <u>Families for Safe Streets</u>, a nonprofit working to end fatal crashes.

"I've been speaking out and advocating for safe streets, safer vehicles, alternatives to driving," Hart said, "simply because I just can't fathom that my daughter was killed—it's violent and it's traumatic—and that nothing would change."

© 2023 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.



Citation: New cars are supposed to be getting safer. So why are fatalities on the rise? (2023, September 26) retrieved 28 April 2024 from https://techxplore.com/news/2023-09-cars-safer-fatalities.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.