

As US Traffic Deaths Soar, Drivers Still Ignore Most Effective Protection



By Erik Lief — September 19, 2016



Photo courtesy: Volvo

Wednesday, Sept. 21 will mark another mixed-emotion anniversary for the family of the late Nils Bohlin, a celebrated inventor and design engineer whose work and landmark signature creation is widely credited with saving more than 1,000,000 lives.

On that day in 2002, Bohlin was inducted into the National Inventors Hall of Fame for his work in the late 1950's developing the three-point safety belt, which is standard equipment in cars everywhere and since its adoption has significantly reduced automobile fatalities around the world.

On the same day, however, Bohlin passed away at the age of 82. So when he posthumously took his place among the world's all-time great inventors -- Thomas Edison (electric lighting, phonograph), Orville and Wilbur Wright (flight) and Enrico Fermi (nuclear fusion) among them -- it was a bittersweet day for his two stepsons, who were thrust into the role of accepting the honor on his behalf.

Perhaps this anniversary can be used to refocus attention on Bohlin's prized, life-saving invention, particularly given the current, sharp rise in traffic fatalities across the United States -- and the biggest one-year rise in 50 years. How sharp? Following a steady decline in the mid-1960s, automobile deaths from 2014 to 2015 spiked 7.2 percent, the single largest increase since 1966 (8.1 percent).

"The nation lost 35,092 people in traffic crashes in 2015," as compared to 32,744 deaths in 2014, according to [data released in late August](#) ^[1] by the Department of Transportation's National Highway Traffic Safety Administration, which "showed traffic deaths rising across nearly every segment of the population." The DOT's [CrashStats](#) ^[2] website reports that those segments include

"passenger vehicle occupants, passengers of large trucks, pedestrians, pedal-cyclists, motorcyclists, alcohol-impaired driving fatalities, male/female, daytime/nighttime."

And NHTSA's most sobering statistic of all: "Almost half of passenger vehicle occupants killed were not wearing seat belts ... 48% of those killed in 2015 were unrestrained."

Doing the math tells us that roughly 17,000 people needlessly died -- just in the U.S. mind you, and just in a single year -- because they failed to use a proven, time-tested device that is virtually guaranteed to safeguard their lives in the event of an accident. (And we say virtually because even if a car occupant is wearing a seatbelt, some of the worst crashes are not survivable.)

The U.S. had made great strides since 2006 when there were 42,708 traffic deaths reported nationwide. And "safety programs such as those that have resulted in increased belt use and reduced impaired driving have worked to substantially lower the number of traffic fatalities over the years," [CrashStats reports](#) [2]. "Vehicle improvements including technologies such as airbags and electronic stability control have also contributed greatly to reduce traffic deaths. However, with the sharp increase in fatalities in 2015, that decade-long downward trend of almost 25 percent has been reduced by almost one-third."

Nationwide, "estimated seat-belt usage increased from 86.7 percent to 88.5 percent in 2015," according to the NHTSA. By state, Oregon has the [best compliance in the nation](#) [3] (98%), followed by Georgia (97%), California (97%) and Alabama (96%). The worst four states are South Dakota (69%), New Hampshire (70%), Montana (74%) and Arkansas (74%).

But what's the explanation for this disturbing reversal and unnecessary loss of life? A couple of things, but the biggest two factors, say the NHTSA, involve lower gas prices and an improving economy.

Generally, when it costs less to drive, motorists -- for both business and pleasure -- tend to drive more. And there's a consistent correlation between the statistics Vehicle Miles Traveled and total traffic fatalities. And "in 2015, vehicle miles traveled (VMT) increased 3.5% over 2014, the largest increase in nearly 25 years." The agency added that "job growth and low fuel prices were two factors that led to increased driving, including increased leisure driving and driving by young people."

So, essentially, cheap fuel has fueled today's steep rise in traffic-related deaths. To drive this grim statistic down, we could just cross our fingers and hope for drastically higher gas prices, right? Or, as a society we could just do something much simpler and smarter: Buckle up *every time you get into an automobile* -- and that includes the back seat, and in taxis as well -- and *remind everyone you ride with* that they should simply [take three seconds to wear their belt](#) [3].

"An unrestrained passenger in the backseat might not only become a projectile that hits the driver in the back of the head; he or she can also be propelled forward with enough force to compress the driver against the steering wheel or windshield," says Dennis Durbin, M.D., director of the Office of Clinical and Translational Research at The Children's Hospital of Philadelphia, speaking to [Consumer Reports](#) [3]. "I suspect that when people choose not to wear their seat belt, particularly in the backseat," he added, "they don't realize that they are putting others in the vehicle at risk."

Moreover, "Rear-seat passengers are three times more likely to die in a crash if they're unbelted," CR adds, citing a recent a Governors Highway Safety Association study.

Yes, a few seconds of preventative action. That's what Bohlin, a former aviation engineer for Saab who designed ejector seats for their planes, strove to achieve with his invention. Volvo, the Swedish automaker which went on to develop its brand by touting its cars to be the world's safest, identified Bohlin and recruited him. In August 1959 the "belt debuted in Volvos and rolled out in the U.S. four years later, thanks to the manufacturer's willingness to share the patent with other automakers," writes the [American Automobile Association](#) [4]. "Seat belts would become mandatory in all cars in the 1960s, as government regulation of the auto industry grew."

Yes, the "invention was patented with what is known as an open patent," [wrote Volvo in 2009](#) [5], when celebrating the 50th anniversary of Bohlin's invention. "That is to say anyone who wanted was granted free use of the design." (However, while patting itself on the back the automaker was also being disingenuous, as it failed to mention that 12 years after Bohlin's breakthrough Volvo [sued at least one manufacturer](#) [6] while seeking to enforce its patent.)

But give the company its due. Because, overall, this innovation -- which today remains the single most effective automotive safety feature ever created -- has made the world safer.

"There are no globally coordinated traffic safety statistics," Volvo stated. "However, it is estimated that more than a million people owe their lives to the safety belt, and it has saved many times that number of people from serious injury." (Volvo is not alone in citing one million lives saved; it's widely reported and accepted.)

So if you're within driving distance of Alexandria, Virginia and interested to learn more about Nils Bohlin and his groundbreaking creation, you can do so at the [National Inventors Hall of Fame](#) [7] on the campus of the U.S. Patent and Trademark Office. And while there you might be entertained and inspired by the unique histories of other inventors, such as 2010 inductee Jacques Cousteau (underwater diving suit), Les Paul (solid-body electric guitar; 2005) and Frank Zamboni, a 2007 inductee, who's delighted ice skaters the world over with his ice resurfacing genius.

But to ensure your safe arrival, just please buckle up before you go.

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Links

[1] <http://www.nhtsa.gov/About+NHTSA/Press+Releases/traffic-fatalities-2015>

[2] <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812318>

[3] <http://www.consumerreports.org/car-safety/fastening-seat-belts-3-seconds-that-save-lives/>

[4] [http://blog.ny.aaa.com/carandtravel/history-of-the-seat-](http://blog.ny.aaa.com/carandtravel/history-of-the-seat-belt/?utm_source=et&utm_medium=ctd&utm_campaign=history_seat_belt)

[belt/?utm_source=et&utm_medium=ctd&utm_campaign=history_seat_belt](http://blog.ny.aaa.com/carandtravel/history-of-the-seat-belt/?utm_source=et&utm_medium=ctd&utm_campaign=history_seat_belt)

[5] <https://www.media.volvocars.com/us/en-us/media/pressreleases/20115>

[6] <http://openjurist.org/435/f2d/981>

[7] <http://invent.org/hall-of-fame/>