

**INSIGHTS** 

**AUGUST 2019** 

## **Higher Ed Transportation Safety: Reducing 15-Passenger Van Risks**

A decade ago, a spate of collisions involving 15-passenger vans led many higher education institutions to stop using them. But now that the National Highway Traffic Safety Administration (NHTSA) has removed its harsher warning for such vehicles, higher education interest has been rekindled — and the potential risks for institutions have returned

Years ago, 15-passenger vans — sometimes driven by students themselves — were popular on campuses across the country. But they were also dangerous: Between 1990 and 2007, close to 1,600 drivers and passengers riding in 15-passengers vans were killed, according to the NHTSA. In 2006, the National Transportation Safety Board (NTSB) issued a safety alert that highlighted various risks of 15-passenger vans. Among other dangers:

- Vans are three times more likely to roll over when they are carrying more than 10 passengers.
- 41% of 15-passenger van occupants who were killed between 2007 and 2016 were ejected from the vehicles, according to the NHTSA.
- Low tire pressure is a common problem that can lead to diminished driving stability.
- Additional passengers and cargo can shift the center of gravity and increase the risk of a driver losing control.







The stark warning from the NTSB contributed to a dramatic decline in the use of 15-passenger vans by colleges and universities. But following numerous design and accessory updates, higher education institutions are once again inquiring about and, in some cases, purchasing these higher occupancy vehicles. The NHTSA has also softened its strong stance in more recent communications.

But because there are only a few of the newer vans on the road, there is insufficient claims data to reliably determine whether the added features have, in fact, made these vehicles safer than previous generations, an issue of concern to education risk professionals who fear that the fatality numbers of the past could return.

Despite the numerous safety enhancements that manufacturers have made over the years, one major issue with 15-passenger vans remains: their aerodynamic structure. These vans tend to be narrow and tall, which makes it easier for them to roll over — especially when they are at capacity, trailering equipment, or carrying loads on their roofs.

While the number of recent van collisions has not been substantial, underwriters are wary of the loss potential from claims involving multiple passengers arising out of a single event. Reinsurers, meanwhile, are pushing back on underwriters for not adequately identifying or pricing exposures. As a result, some auto liability insurers will not consider coverage. Those insurers that are willing to offer coverage are typically charging more and closely scrutinizing driver training and supervision, internal controls, and other risk management practices.

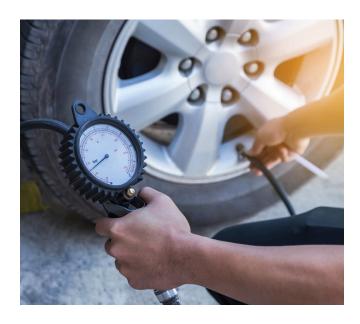
## **Reducing Your Risk**

Driver assistance technologies, including electronic stability control, forward collision warnings, and lane departure sensors are capable of eliminating 94% of fatal crashes involving human error, according to the NHTSA, making 15-passenger vans substantially safer. But with the lives of students, coaches, and faculty members potentially at stake, colleges and universities need to tread carefully.

One way educational institutions can avoid risk is to consider purchasing minibuses for their transportation needs. Although they tend to be more expensive, minibuses have wider wheelbases, making them less likely to roll over; they can also be more comfortable and spacious for passengers. Van rentals can also present an economical alternative to purchasing and maintaining vehicles and a way to transfer financial risk to vendors.

That said, institutions that purchase or lease 15-passenger vans should consider the following actions to minimize their risk:

- Establish clear driver qualifications. Having experienced and trained drivers is paramount, and it's important that education institutions be highly selective in who they allow to get behind the wheel. Schools and universities should establish an age limit for drivers, confirm they have valid US or Canadian driver's licenses and clean driving records, ensure they successfully attend van driver education programs, and provide coaching to help them better understand the vans' handling characteristics.
- Manage vehicle weight. Aside from keeping the number of passengers down, it's important to keep a van's center of gravity toward the front of the vehicle rather than the back, where it could reduce stability and increase the likelihood of rollovers.
   Van operators should fill seating front to back and minimize





weight in the rear when there are fewer than 15 passengers onboard. It's also important to avoid strapping equipment to vehicle roofs; instead, stow equipment forward of the rear axle and no higher than the seat backs. Also consider prohibiting towing when a van is intended to be at full passenger capacity.

- Check tire pressure. Low tire pressure has been identified as a
  contributor to crashes, making continuous monitoring essential.
  Newer vehicles may include tire pressure sensors that can alert
  a driver when pressure isn't optimal. While this is often not
  standard equipment, it is a valuable, low-cost option that can be
  instrumental in improving vehicle stability.
- Install rear-view cameras. Collisions while vans are reversing
  are common since a vehicle body and passengers often obstruct
  a driver's view, especially when a van is at capacity. Even if it's
  not a standard feature, consider adding rear-view cameras to any
  vans you operate; this option can pay for itself if a single collision
  is prevented.
- Invest in lane departure sensors and frontal collision warning technology. Alerting a driver when the vehicle is wavering out of its lane or trailing too close behind another vehicle can help avoid collisions. Such safety features, however, should not be considered replacements for experienced and properly trained drivers.
- Limit driving speed and require headlights at all times.
   A fully loaded 15-passenger van is difficult to stop when traveling at 60 miles per hour or more, and rollovers are more likely to happen at high speeds. To limit vehicle speeds, consider installing a speed governor and restricting van use to local roads. Additionally, having headlights on can make a vehicle more visible to other drivers and potentially contribute to crash prevention.

- Insist on seatbelt use. Almost three-quarters of 15-passenger van occupants killed in crashes between 2007 and 2016 were not restrained. The NHTSA recommends constant use of seatbelts since an unrestrained passenger is four times more likely to be killed than one who is using a seatbelt.
- Consider replacing older vehicles. If a school is still operating pre-2010 passengers vans, consider upgrading to newer models.
   The NHTSA's safercar.gov website can be helpful in researching potential options.

The NHTSA's current warning on 15-passenger vans is not as dire as it once was, and — like other vehicles — they have seen numerous design and accessory updates in recent years. Still, significant risks remain for colleges and universities that use such vehicles. The operation of a high-capacity passenger van fleet requires the utmost oversight in order to minimize potential risks. The higher the passenger capacity, the higher the risk of a potentially severe incident – no matter the age of the vehicle. Education entities that purchase or lease these vehicles should take all measures to minimize the risks and protect students and staff riding in high-occupancy vehicles.

For more information, visit marsh.com, contact your local Marsh representative, or contact:

RICHARD VOHDEN, MS, CSP, CPCU Senior Vice President Marsh Risk Consulting +1 908 642 8815 richard.a.vohden@marsh.com

MARK TURKALO Senior Vice President National Education & Public Entity Placement Leader +1 212 345 5250 mark.j.turkalo@marsh.com

Marsh is one of the Marsh & McLennan Companies, together with Guy Carpenter, Mercer, and Oliver Wyman.

This document and any recommendations, analysis, or advice provided by Marsh (collectively, the "Marsh Analysis") are not intended to be taken as advice regarding any individual situation and should not be relied upon as such. The information contained herein is based on sources we believe reliable, but we make no representation or warranty as to its accuracy. Marsh shall have no obligation to update the Marsh Analysis and shall have no liability to you or any other party arising out of this publication or any matter contained herein. Any statements concerning actuarial, tax, accounting, or legal advice, for which you should consult your own professional advisors. Any modeling, analytics, or projections are subject to inherent uncertainty, and the Marsh Analysis could be materially affected if any underlying assumptions, conditions, information, or factors are inaccurate or incomplete or should change. Marsh makes no representation or warranty concerning the application of policy wording or the financial condition or solvency of insurers or reinsurers. Marsh makes no assurances regarding the availability, cost, or terms of insurance coverage. Although Marsh may provide advice and recommendations, all decisions regarding the amount, type or terms of coverage are the ultimate responsibility of the insurance purchaser, who must decide on the specific coverage that is appropriate to its particular circumstances and financial position.