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Instability of 15-Passenger Vans Makes Them Unsafe

15-passenger vans are a unique and dangerous breed of vehicle. While their appealing seating capacity makes it convenient to transport groups of people from place to place, their instability on the road should make everyone aware of the fatal dangers they pose.

One look at the Van Angels Web site (“saving lives, one van at a time”) reveals just how dangerous these large vans are. They report evidence that shows how 15-passenger vans are unstable by their very design, since these vehicles were originally designed to transport cargo, not people. Their center of gravity is high, which means that rollovers can occur at only 35 miles per hour.



When you add ten or more people, the weight distribution only increases the rollover risk if the driver needs to turn sharply to avoid an obstacle in the road. SafetyForum reports that “Overall, the vans were three times more likely to roll over in a crash when loaded with 10 or more passengers than when they carried fewer than five.” They also claim, “When vans are fully loaded, single wheels do not provide adequate rear traction to perform emergency steering maneuvers without fishtailing.”

What that means for your organization is that you need to alert your van drivers of the serious risks of driving these potentially unstable vehicles, and train them to be experienced drivers of 15-passenger vans.

Ensuring Passenger Safety and Preventing Rollovers

The biggest safety factor in providing passenger safety is being able to prevent rollovers. Rollovers can occur when the large, high-center-of-gravity van begins to fishtail. If the driver cannot regain control of the vehicle, then a rollover is imminent. The National Highway Traffic Safety Administration (NHTSA) says the following things can cause these awkward vehicles to fishtail and rollover:

- **“The van goes off a rural road.** If this occurs, the van is likely to overturn when it strikes a ditch or embankment or when it is tripped by an object or runs onto soft soil.”
- **“The driver is fatigued or driving too fast for conditions.** A tired driver can doze off and lose control. The driver can also lose control when traveling at a high speed causing the van to slide sideways off the road. The grassy or dirt medians that line highways can often cause the van to overturn when the tires dig into the dirt.”
- **“The driver overcorrects the steering as a panic reaction to an emergency or to a wheel dropping off the pavement.** Especially at freeway speeds, this situation can cause the driver to lose control, resulting in the van sliding sideways and rolling over.”

15-Passenger Van Safety Risk Alert

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NHTSA encourages your awareness to help prevent rollovers. They recommend driving cautiously on rural (and especially curved rural) roads. They advise knowing what to do if your vans' wheels "drop off the roadway" or pavement (i.e., "*gradually* reduce speed and steer back onto the roadway when it is safe to do so").

Remember that 15-passenger vans are top-heavy, so do not overload them. Never allow more than 15 people in the van and do not carry cargo on the roof. Heavily loaded vans are at a greater risk for rolling over if the driver has to maneuver the steering abruptly. And make sure your tires have proper treads to avoid potential slides on wet pavement or possible tire failures.

Improvement Efforts

15-passenger van manufacturers such as General Motors and Ford are using electronic control stability (ECS) technology in their newer models to help make their vehicles safer. The Insurance Institute for Highway Safety explains that ESC technology "is designed to help prevent drivers from losing control of their vehicles during high-speed maneuvers or on slippery roads. It is an extension of antilock brake technology with additional sensors that continuously monitor how well a vehicle is responding to a driver's steering input. When the sensors detect the vehicle is straying from the driver's intended line of travel, ESC brakes individual wheels to keep the vehicle under control. ESC also may modulate engine speed. All 2006 and later model 15-passenger vans are equipped with ESC."¹ Other improvements include the addition of airbags and tire pressure monitoring systems.²

Free Van Safety Hangtags

You can get free 15-passenger van safety hangtags by calling the NHTSA's Vehicle Safety Hotline at **888-237-4236** or by logging on to their Web site at www.nhtsa.gov. The hangtag comes in English or Spanish and provides a quick reminder of what to check before you drive the 15-passenger van.

¹ "Q&A: 15-Passenger Vans," January 2009, <http://www.iihs.org/research/qanda/fifteen_passenger.html>, accessed on June 29, 2009.

² "Fatalities to Occupants of 15-Passenger Vans, 2003-2007: NHTSA's Action Plan to Improve 15-Passenger Van Safety," *Traffic Safety Facts Research Note*, DOT HS 811 143, May 2009, p.4, <<http://www-nrd.nhtsa.dot.gov/Pubs/811143.pdf>>, accessed on June 29, 2009.