
**ADVISORY 23.1 VEHICLE SAFETY: 15-PASSENGER VANS AND OTHER
VEHICLES WITH A HIGH CENTER OF GRAVITY**

The U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) has issued a cautionary rollover warning to users of passenger vans that provide seating for a driver and up to fourteen passengers. These so-called 15-passenger vans have a risk of rollover that increases dramatically as the number of passengers increases from fewer than five to the maximum number. Fifteen-passenger vans with ten or more occupants had a rollover rate in single vehicle crashes that was nearly three times the rate of lightly loaded vans.

NHTSA-sponsored research showed that loading a 15-passenger van shifts the center of gravity upward and rearward leading to an increase in the likelihood of rollover. Shifting the center of gravity increases the potential for loss of control in panic maneuvers. A copy of "The Rollover Propensity of Fifteen-Passenger Vans" can be obtained at

<http://www.nhtsa.dot.gov/people/ncsa/reports.html#2001>

Federal law prohibits the sale of fifteen-passenger vans for the school-related transport of elementary and secondary school children. However, no such prohibition applies to the same vans used to transport college students or other persons. Commercial operators transporting sixteen or more persons in a vehicle are required to hold a valid Commercial Driver's License (CDL) which requires specialized training and driving skills.

The regulatory "loophole" that exists for vans carrying up to, but no more than, 15 post-secondary school age passengers has not been beneficial for occupants of such vans or the educational institutions owning them. There have been several serious rollover accidents involving 15-passenger vans loaded with college students, oftentimes driven by another student. For many people, their only driving experience is with a small automobile. Department and organization administrators need to recognize this fact when they designate an employee or student as the driver of a vehicle that's twice the height and length of their own car, half again as wide, weighs five tons, and can carry more than a dozen persons.

Eighty percent of those who died in these accidents in the year 2000 were not wearing seat belts. The use of seat belts dramatically increases the chances of survival during a rollover crash.

Although not included in the NHTSA alert, large sport-utility vehicles (SUV's) with a high center of gravity that provide seating for more than four passengers may also become more prone to rollover as the number of passengers increases. Sedans or station wagons built on an automobile chassis have a lower center of gravity and are therefore much less prone to rollover.

University of Cincinnati college, department, office, and student organization administrators and supervisors should comply with the following guidelines:

1. Always utilize the safest mode of travel for University of Cincinnati faculty, staff, students, and visitors.
2. Whenever possible, avoid using 15-passenger vans to transport more than nine (9) persons, or large sport-utility vehicles with a high center of gravity to transport more than six (6) persons, including the driver and the luggage or equipment and supplies associated with the trip.

3. Use passenger sedans, station wagons, or mini-vans each capable of seating 5 or 6 adults instead of 15-passenger vans or large sport-utility vehicles with a high center of gravity. For large groups, make arrangements with UC Transportation Services, 556-4424, for a bus and trained driver to transport the occupants with a higher degree of safety.
4. Require all occupants to use seat belts.

University of Cincinnati colleges or departments that own 15-passenger vans should designate drivers for them and provide hands-on driver's training including bus/van road testing for these designated drivers prior to transporting more than nine persons (driver and eight passengers) and their associated luggage or equipment and supplies.

Questions concerning this policy may be directed to Environmental Health & Safety, 556-4968.