



## **15-Passenger Van Safety Hazards – Thirty years of Faulty Design and Agency Inaction**

*The dangerous design of 15-passenger vans has been responsible for the deaths of too many Americans, yet the vans continue to carry families, church and school groups on outings.*

- 1971                    The full-size Dodge Ram Wagon passenger van, one of the oldest 15-passenger vans, hits the showroom;
- 1972                    During the development of the Ford E-series 15-passenger van, Ford recognizes the feasibility of using dual rear wheels to enhance load capacity, better traction and handling characteristics, but decides against this design for cost reasons;
- 1979                    Ford introduces its E-series 15-passenger van, with the same wheelbase of their traditional van and an added 18-inch overhang in the rear to seat additional passengers;
- 1992                    The National Highway Traffic Safety Administration (NHTSA) publishes “A Statistical Analysis of Vehicle Rollover Propensity and Vehicle Stability”<sup>1</sup> and shows that loading additional passengers into a vehicle has a negative effect on both the static stability factor and the tilt table performance of a variety of vehicles. Fifteen-passenger vans were not included in this original study;
- Nov. 4 1993            Value Rent-A-Car sends a letter to Ford, following a rash of rollovers involving Value’s Ford Aerostar 15-passenger vans, asking Ford to send them additional safety information relating to the vehicle. Ford responds by asking that Value “not put things like this in writing,” and did nothing. Value places its own warning sticker on the vans;
- 1993                    NHTSA sends its first set of letters to the National Automobile Dealers Association, state directors of pupil transportation and independent education groups outlining the Federal requirements for school bus safety and NHTSA’s policy that pre-school and school aged children not be transported in 15-passenger vans due to safety concerns. Similar letters are sent in 1997 and 2001;
- Jan. 2000              The National Association of State Directors of Pupil Transportation issues a report and statement suggesting that educational institutions should transport students in school busses, which are held to strict safety standards, not in 15-passenger or other high-occupancy vans, that are not held to these standards.

April 2001	NHTSA releases a Research Note <sup>2</sup> on the rollover propensity of 15-passenger vans finding that, for example, a fully loaded 15-passenger van has 6 times the rollover risk, in a single vehicle accident, of the same van with only 5 passengers. NHTSA also issues a Consumer Advisory warning consumers about the risks of 15-passenger vans;
April 2002	NHTSA issues a second Consumer Advisory warning of 15-passenger van hazards;
April 2002	GuideOne, a leading insurer of churches and their vehicles, stops selling new policies to owners of 15-passenger vans. Numerous smaller insurers follow suit.
June 2002	DaimlerChrysler discontinues production of 15-passenger vans;
Nov. 1 2002	The National Transportation Safety Board issues a safety report on 15-passenger vans which includes recommendations to address the safety hazards of the vans, directed to General Motors, Ford and NHTSA;
Nov. 21, 2002	Public Citizen releases “Stopping Rollovers: The Dual-Wheel Solution for 15-Passenger Vans,” detailing the danger of 15-passenger vans, suggesting a dual-wheel solution to the vans’ stability problems and calling on NHTSA and manufacturers to make the vans safer;
Nov. 2002	NHTSA, partnering with the Health Resources and Services Administration and the American Academy of Pediatrics, announces a training program for child care providers to educate them on the benefits of transporting children in school busses versus 15-passenger vans;
March 2003	Sen. Snowe introduces S.717, the Passenger Van Safety Act of 2003, to address 15-passenger van safety. Rep. Udall introduces a similar bill, H.R. 1641, in the House of Representatives.
July 15, 2003	An National Transportation Safety Board investigation into two different 15-passenger van crashes concludes that “contributing to the severity of the injuries was the lack of appropriate Federal Motor Vehicle Safety Standards applicable to 15-passenger vans in the areas of restraints and occupant protection,” and makes recommendations to improve 15-passenger van classification, driver training, occupant protection, and tire condition, inspection, and maintenance.
Sept. 25, 2003	California Assembly Member Carol Liu’s 15-Passenger Van Safety bill, AB 626 becomes law restricts the use of these vans in the state;

- Sept. 2003
- NHTSA issues an Action Plan for 15-passenger Van Safety that calls for:
- additional research;
  - evaluation of a rollover-hazard label for the vans;
  - passage of a rule requiring lap and shoulder belts in all seating positions for all vehicles, including 15-passenger vans, up to 10,000 lbs GVWR;
  - inclusion of 15-passenger vans in the upgrade of the as-yet un-issued and long delayed side impact protection rule; and
  - inclusion of 15-passenger vans in the upgrade of the as-yet un-issued and long-delayed roof crush rule.
- Feb. 12, 2004
- Senate passes S.1072, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003 (SAFETEA 2003), which includes provisions addressing 15-passenger vans that would:
- Include all 15-passenger vans in NHTSA's dynamic rollover testing program (Final Rule by 9-31-05);
  - Require 15-passenger vans to comply with all existing and prospective FMVSS Safety Standards for occupant protection and vehicle crash avoidance that are relevant to them (Final Rule by 9-31-05);
  - Include 15-passenger vans in NHTSA's New Car Assessment testing and rating program (Final Rule by 9-31-05); and
  - Require an evaluation of technologies, like electronic stability control systems, that could assist 15-passenger van operators in controlling the vehicles.
- April 21, 2004
- In its investigation of the fatal crash of a child care center's 15-passenger van, the National Transportation Safety Board found evidence that vehicles built to school bus standards offer occupants protection superior to 15-passenger vans. Based upon its analysis of the crash, the National Transportation Safety Board recommended that:
- The 50 states and the District of Columbia require that all vehicles carrying 10 or more passengers transporting children to and from school and school-related activities comply with school bus structural standards or equivalent safety standards; and
  - Because seat belts in 15-passenger vans are designed such that they fit poorly, manufacturers make lap and shoulder belts adjustable.
- Today
- 15-Passenger vans continue to be exempt from numerous federal safety standards including the following:
- **FMVSS 201: Occupant Protection in Interior Impact** (15-passenger vans exempted from upper interior head protection). This standard specifies requirements to afford impact protection for occupants.<sup>3</sup>
  - **FMVSS 202: Head Restraints** (15-passenger vans exempted from placing head restraints in rear seating positions). This standard

specifies requirements for head restraints to reduce the frequency and severity of neck injury in rear-end and other collisions.<sup>4</sup>

- **FMVSS 206: Door Locks and Door Retention Components.** This standard specifies requirements for side door locks and side door retention components including latches, hinges and other supporting means, to minimize the likelihood of occupants being thrown from the vehicle as a result of impact.<sup>5</sup>
- **FMVSS 214: Side Impact Protection** (15-passenger vans exempted from dynamic test). This standard specifies performance requirements for protection of occupants in side impact crashes. Its purpose is to reduce the risk to vehicle occupants in side impact crashes by specifying vehicle crashworthiness requirements in terms of accelerations measured on anthropomorphic dummies in test crashes, by specifying strength requirements for side doors, and by other means.<sup>6</sup>
- **FMVSS 216: Roof Crush Resistance.** This standard establishes strength requirements for the passenger compartment roof. Its purpose is to reduce the crushing of the roof into the passenger compartment in rollover accidents.<sup>7</sup>
- **49 CFR 575.105: Rollover Warning Label.** This section requires manufacturers of utility vehicles to alert the drivers of those vehicles that they have a higher possibility of rollover than other vehicle types and to advise them of steps that can be taken to reduce the possibility of rollover and/or to reduce the likelihood of injury in a rollover.<sup>8</sup>



## **Endnotes**

---

<sup>1</sup> T.M. Klein, *A Statistical Analysis of Vehicle Rollover Propensity and Vehicle Stability*, SAE Tech. Pap. 920584 (Warrendale, PA: Society of Automotive Engineers, 1992) 135-150.

<sup>2</sup> W. Riley Garrott, Barbara Rhea, Rajesh Subramanian, and Gary J. Heydinger, *The Rollover Propensity of Fifteen-Passenger Vans*, Research Note (Washington, DC: NHTSA, April 2001).

<sup>3</sup> *See* 49 CFR § 571.201.

<sup>4</sup> *See* 49 CFR § 571.202.

<sup>5</sup> *See* 49 CFR § 571.206.

<sup>6</sup> *See* 49 CFR § 571.214.

<sup>7</sup> *See* 49 CFR § 571.216.

<sup>8</sup> *See* 49 CFR § 575.105.