

What are some other safe driving tips?

- Select experienced drivers to drive the van on a regular basis. Drivers should be over 21 years old
- When possible, seat passengers in rows from front to back
- Don't allow more than 15 people to ride in the van at a time
- Make good use of mirrors when changing lanes
- Know that 15-Passenger vans do not handle easily during abrupt steering maneuvers
- Know that 15-Passenger vans require additional braking distance and time
- Never load anything on the roof
- Organizations should have a written safety policy

Where can you go for more information?



<http://www.nhtsa.dot.gov/cars/problems/Rollover/index.htm>



<http://www.projectcog.com>

Who is Nicholas Ekladyous?



I am Nicholas Ekladyous, author of *15-Passenger Van Safety for Dummies* and creator of *Project COG*. *Project COG* was a project I did for my local science fair on the rollover propensity of 15-Passenger vans. The inspiration for this project came from the various media reports on recent van rollover accidents.

I am currently a student at Imlay City Middle School and am in the 8th grade. I plan to attend the University of Michigan in Ann Arbor and study Aerospace Engineering.

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15 - Passenger Van Safety

FOR DUMMIES[®]

1st Edition

Everything you need to know



A Reference for the Rest of us!

Nicholas Ekladyous
Flint Area Science Fair
Finalist

What is a 15—Passenger Van?

15—Passenger vans typically have seating positions for the driver and 14 passengers.



They are commonly used by: colleges, day care centers, van pools, hotels, and especially church groups. These vehicles are manufactured by Ford Motor Company and General Motors. DaimlerChrysler no longer produces the vans. 15—Passenger van models include:

- Chevrolet Express 3500
- GMC Savana G3500
- Dodge Ram Van/Wagon B3500
- Dodge Ram Wagon B350
- Ford Econoline E350
- Ford Club Wagon E350
- GMC Rally/Vandura G3500

On the road today, there are approximately 500,000 registered 15—Passenger vans.

What are the risks?

Research has found that the risk of rollover accidents increases as the van is loaded with passengers.



A van loaded with 10 or more people has an 85% chance of rolling over in a single vehicle crash. Between 1990 and 2000, 864 people have died in rollover accidents in a 15— Passenger van. That is over two 747 jumbo jets filled to capacity.

The increased risk occurs because as more and more people are loaded into the van, it's center of gravity shifts upward and rearward. As a result, the van has less resistance to rollover and handles differently from other passenger vehicles.

Unlike most passenger vehicles, 15—Passenger vans do not have to meet key rollover safety standards. 15—Passenger vans are exempt from: static rollover resistance programs, dynamic rollover testing and roof crush resistance.

What can you do to keep yourself safe?

The easiest, most consistent, most cost effective way to keep yourself safe in a 15—Passenger van is to wear a safety belt. In the last 10 years, 80% of the people killed in rollover crashes in 15—Passenger vans were not belted in. Safety belt use is especially critical because large numbers of people die in rollover crashes when they are thrown from the vehicle. Drivers should be responsible for strictly enforcing safety belt use.

Since most 15—Passenger vans roll over in single vehicle accidents, most of them are preventable. Here are some tips you can remember to help keep yourself safe:

- **Avoid conditions that lead to loss of control.** Make sure you are completely alert when driving and not intoxicated or tired in any way. Be sure to slow down & play it safe in bad weather.
- **Drive carefully on rough roads.** 15—Passenger vans tend to roll over when “tripped” by an irregular road surface like a rural road.
- **Properly maintain your tires.** Make sure your tires are properly inflated and that the tread is not worn or dry-rotted. Check tires frequently.