15-Passenger Van Safety Awareness Program

Environmental Health & Safety Department
570-662-4906
The objective of this presentation is to increase the safety awareness of passenger van drivers, thus reducing the risk of accidents, especially rollovers.
Training Outline

- NHTSA Report Overview
- General Accident Facts
- 15-Passenger Van Facts
- Driving Procedures and Tips
- Mansfield University Policy
- Check-Out Procedures
Before continuing in this presentation, click the link below to open the 15-Passenger Van Driver Assessment and Safety Awareness Training Exam. Print the exam and answer each question as you review this program.

After completing the assessment and exam, make a copy for your records and forward it to the Environmental Health & Safety Office. The information you provide and exam results will be evaluated. The appropriate departments (e.g. Brooks Maintenance, Garage) will be provided documentation to verify your training upon check-out of a passenger van.

IMPORTANT: After printing the test, use the “back” button to return to the slide presentation.
Safety Agencies

National Highway Transportation Safety Administration.

NSC

National Safety Council®
• 15-passenger vans have an increased rollover risk under certain conditions.

• The risk of rollover increases dramatically as the number of occupants increases from fewer than five occupants to over ten passengers.

• 15-passenger vans (with 10 or more occupants) had a rollover rate in single vehicle crashes that is nearly 5 times the rate of those that were lightly loaded.
Why?

- Designed for High Occupancy
- Loaded Heavy With Cargo
- Higher Center Of Gravity
- Long, Narrow Wheel Base
Loading 15-passenger vans causes the center of gravity to shift rearward and upward increasing the likelihood of rollover. A shift in the center of gravity will also increase the potential for loss of control in panic maneuvers.

It is important that the van be operated by experienced drivers. They should understand and be familiar with the handling characteristics of their vans, especially when fully loaded.
NHTSA Reports (continued)

- Institutions using 15-passenger vans should require seat belt use at all times.

- Any load placed on the roof will be above the center of gravity of the vehicle and will increase the likelihood of rolling over.
Accident Facts

- 25% of all driving accidents are the result of excessive speed.

- 60% of van rollovers are the result of under-inflated tires.

- 70% of driving accidents occur within 25 miles from home.

- 1 out of 4 employees who drive as a part of their jobs experience an accident while at work.

- Most people know someone who has died in a car accident.
15-Passenger Van Facts

- A speed that may be acceptable in a passenger car could be dangerous in a van.

- As the van is loaded with passengers, the center of gravity shifts upward above the wheels. The higher the number of passengers, the greater the likelihood of a rollover, as more weight shifts towards the rear. 
  
  *Always fill the front seats first.*

- The shift in the center of gravity will also increase the potential for loss of control in panic maneuvers.

- Soft shoulders and culverts pose a hazard in rural areas.
Driving Tips

• For all kinds of vehicles.
• Defensive Driving Theories
• Dealing with aggressive drivers
• Backing the vehicle
• Highway driving
• City Driving
• Rural Driving
• Emergency situations
• Vehicle accidents
Driving Tips for All Vehicles

- Drive conservatively.
- Avoid excessive speed and abrupt maneuvers.
- Don’t drive tired.
- Don’t drive in bad weather, if possible.
- Take rest breaks often (every 2 hours is recommended)
- Wear seat belts at all times when the vehicle is in motion.
- Drive only during the day, if possible.
- Require someone to be awake in the front seat with the driver on long trips.
For All Vehicles (continued)

For trip caravans:

- Radio or cellular phone communications should be established between vehicles on multi-vehicle trips. Drivers should not use cellular phones or radios unless there is an emergency.
- Trip leader to drive lead vehicle and set the pace. . . no other vehicle shall pass.
Safety Belts!

- According to the NHTSA, 80% of people killed in rollover crashes were not wearing their safety belt.

- Many injuries and deaths attributed to large vans are a result of ejection. Once vans begin to roll over, many people are killed because they did not use seatbelts.

- This is the result of poor supervision by the driver and senior occupants who fail to ensure that all passengers are buckled up.
Defensive Driving

- Drive with courtesy.
- Stay calm when driving.
- Concentrate - Use reference points to ensure vehicles stays on pavement and in the correct lane.
- Drive cautiously, leaving a “safety cushion” between your vehicle and others to avoid having to make sudden maneuvers.
Dealing With Aggressive Drivers

- Avoid eye contact.
- Don’t cut in front of other drivers.
- Allow fellow drivers to merge, while keeping a safe distance.
- Don’t aggravate fellow drivers with hand gestures.
- Never tailgate!!
- Use your horn sparingly.
- Give aggressive drivers plenty of space to move on without provocation.
Backing The Van

- Always use a spotter if possible.

- Make an allowance for the extended length of the van behind the rear wheels.

- Back to the left (driver’s side).

- **Never** back up if you miss a ramp/exit. Go to the next exit and return to your intended exit.

- Use (properly adjusted) outside mirrors. (adjusted outward so you can see your blind spots)
How to Correctly Adjust Your Side-View Mirrors:

In a normal seating position, you should not be able to see any part of your own vehicle in the side-view mirrors. *Watch the animated illustration below.*

Adjust the side-view mirrors just beyond the point where you could see the side of the car on the inside edge of the mirror.
Highway Driving

- When driving a passenger van, avoid lane changes unless absolutely necessary. Always use your signals with ample notice to other drivers.

- Merges: Signal and move steadily into the drive-lane. Don’t cut off other vehicles.

- Blind Spots:
  ~ Never cruise in another vehicle’s blind spot! If the other driver cannot see you, the driver may attempt a lane-change, causing you to make an abrupt avoidance maneuver which can result in loss of control of the van and potential rollover.

  ~ When changing lanes, use both mirrors and a brief head-turn back. Have the front seat passenger assist you, if needed.
Slow moving vehicles:

~ Allow more distance than usual, as slow moving drivers are likely to brake suddenly or make unexpected maneuvers.

~ Also, allow more distance if you are being tailgated. This will enable you to stop more gradually if the driver in front of you stops suddenly.

~ Pass with caution. Again, a slow driver may make an unexpected move which could result in an abrupt maneuver on your part.
Safe Following Distance:

How do you determine a safe following distance?

- Look for a land mark alongside the road, such as, a road sign.
- When the vehicle in front of you passes the landmark count four seconds by saying: one thousand and one, two thousand and two, one thousand and three, one thousand and four'.
- If you reach the mark before you have finished counting, you are too close.
- In bad weather, add one to two seconds.
- Always make sure there is enough space in front of you and behind you to give you time to react to problems.
- If someone overtakes you, readjust your following distance.
Entrance/Exit Ramps:

- Rollovers can be caused by excessive speed while turning.

- Posted speed limits on ramps are intended for cars. Slow your van to 5 miles-per-hour below the posted speed limit on ramps.
Hydroplaning

- At speeds as low as 30 mph, the tires start to ride up on a film of water like water skis. This is called “hydroplaning”.

- At 55 mph, the tires may be totally up on the water.

- In a rainstorm, tires may lose all contact with the road at 55 mph. If this is the case, there is no friction to brake, speed up, or corner. A gust of wind, a change of road level, or a slight turn can create a skid.

- To avoid hydroplaning, you must slow down in heavy rain, standing water or slush on the road. Do not drive on bald or badly worn tires.
Highway Driving (Continued)

Remember

You are driving a longer, heavier vehicle. When driving on a highway or open road, your responsibility is to be aware of, and avoid situations which may result in the loss of control of your van. Watch the road at least ¼ of a mile ahead. Drive slower and leave an ample clearance between your vehicle and others, so that you can avoid abrupt maneuvers and/or hard breaking.
City Driving

Look far ahead at least 1 1/2 blocks for:

- Stop signs
- Stop lights
- Yield Signs
- Signals
- Blind spots
- Pedestrians

- Bicyclists
- Vehicles entering your drive-lane from parking spaces or side streets and alleys
Rural Driving Considerations

- Bicyclists
- Walkers
- Slow Agricultural Vehicles
- Deer (Don’t attempt to avoid hitting small animals!)
- Soft Shoulders
- Culverts
- Curves, Hills and Narrow Roads
If your wheels leave the pavement...

...never attempt to correct the van while maintaining your speed.

~Due to the weight of the van, inertia will cause the rear-end to try to overtake the front (fishtail). You will lose control of the van and will likely roll.

~Slow down (to a near-stop if necessary) before righting the vehicle.
The result of attempting to re-enter the pavement at highway speeds
Picking up and Discharging Passengers

- Pull off to a non-congested area with excellent visibility.
- If possible, avoid pick-up and discharge locations where passengers must cross a street or highway.
- If passengers must cross a roadway, do not wave them across the road in front of your van. Pedestrians should cross at a crosswalk or other controlled area and make their decision on when to safely proceed.
In Summary:

- Vans are not cars and don’t handle like cars.
- Inspect your van before each trip, including all controls and signals, tire condition and pressure (Critical!)
- Load your passengers from front to rear.
- Ensure all passengers are correctly wearing their safety belts.
Summary (Continued)

- Do not exceed posted speed limits.

- Drive 5 mph slower than the posted limit on entrance/exit ramps and sharp curves.

- Maintain a “cushion of safety” between your van and vehicles in front of, and around you.

- Stay out of other driver’s blind spots. Be aware of cars entering or cruising in your blind spots.
• Allow more distance between you and the vehicle in front than you would if you were driving a car. For following distances, this means you should be able to count one-thousand and one thru one-thousand and four between the vehicle in front and your van using a fixed reference point.

• In inclement weather conditions, allow more distance than normal, at least 5–6 seconds from a fixed reference point.

• If your tires leave the paved road surface, re-enter the pavement very slowly to avoid losing control of your van.
Mansfield University Policy

Minimum Training Requirement for Authorized Drivers:

- Mansfield University Coaching Staff, Faculty or Employees having completed web-based 15 Passenger Van Safety Awareness Training.

- Student Workers who are being compensated for driving and have completed an approved University Van Driver Safety Course or web-based 15 Passenger Van Safety Awareness Training.
Mansfield University Policy (Continued)

- Driver’s must have a valid state driver’s license.
- Driver must have completed 15-Passenger Van Safety Awareness Training
- Training rosters will be provided to Brooks Maintenance Building and Garage.
- Keys must be picked up by the driver.
- Inspect the vehicle and report any problems immediately.
The driver is responsible to inspect the van for operable safety devices, i.e., brakes, brake lights, headlights, turn signals and properly adjusted mirrors. Check the tire condition and pressure.

The driver and the senior ranking passenger are responsible to ensure that all van occupants are properly wearing their seatbelts at all times.

If less than full capacity, passengers must first occupy the seats in the front of the van.
Marshall University Policy
(Continued)

- Cargo is to be carried inside the van. Under no circumstances may items be placed on the roof.

- A spotter is required for all backing situations, if you have a passenger to assist.

- Drivers are not to exceed the posted speed limit.

- On highways with speed limits above 60 mph, the speed limit for 12-15 passenger vans owned or operated by USNA complex personnel is 60 mph.
Accident Procedures

- Never leave the scene of an accident.
- Report the accident to the police.
- Never admit fault. Provide factual information to the emergency response personnel, i.e., Police and EMTs.
- Gather all the facts (date, time, witnesses, phone numbers, etc.)
- Immediately report all accidents to your chain of command and the Mansfield University Safety Office.
For More Information:

Contact the Mansfield University Safety Office: 570-662-4906

!!! The Safety Department has two excellent videos available for checkout by Mansfield University departments:

- Coaching the Van Driver - National Safety Council
- Rollover – CBS 60 Minutes

The Safety Department is also available to conduct classroom training. Contact the Safety Department to schedule the training.
Thank you...

...for taking the time to complete this training presentation!

As a “professional” driver, you are responsible for the safety of your van passengers.

Mansfield University Safety Department
http://mansfield.edu/environmental-health-safety/