

15 PASSENGER VANS

BEST PRACTICE GUIDE

.....

A traffic-related injury occurs every ten seconds in the United States. An additional five people die every hour in an automobile accident. 23% of all occupational deaths in 2000 were attributable to car accidents, making driving the leading cause of work-related death.



THE SILVER LINING®



15 PASSENGER VAN BEST PRACTICES

The National Highway Traffic Safety Administration (NHTSA) issued a warning detailing the rollover hazard posed by 15 passenger vans. Due to several fatal accidents involving 15 passenger vans, a federal study was conducted to determine the safety of these vehicles and the leading causes of rollover accidents. The study made several findings to help identify contributing factors to 15 passenger van rollovers. The NHTSA concluded the following:

- 15 passenger vans are three times more likely to roll over when loaded with ten or more passengers.
- Increased speeds (35 mph or greater) greatly increase the risk of rollovers.
- 15 passenger van's center of gravity shifts up and to the back, increasing rollover risk during panic maneuvers by drivers.
- Overloading (passengers or cargo) greatly increase the risk. (see video to the right)
- 15 passenger vans are difficult to control if a tire blows.
- Inexperienced drivers are far more likely to be involved in rollovers than experienced drivers.

These findings illustrate the dangers posed by 15 passenger vans and why proper driver selection and training is important in helping prevent vehicle rollovers. The following “Best Practices” for the operation of 15 passenger vans are designed to keep drivers, passengers, and other motorists as safe as possible. The dangers of 15 passenger vans and rollovers are well-known, but compliance with these recommendations can ensure the safest use possible.



DAILY VEHICLE INSPECTIONS

Inspection Logs

All 15 passenger vans should be equipped with a simple vehicle inspection log. The log should include the following information:

- Last driver to inspect vehicle
- Date of inspection
- Details of inspection

Tires

Problems with tires are one of the leading causes in 15 passenger van rollovers. Tires that aren't regularly inspected are often past their service life and under-inflated. Under-inflated or overly-worn tires can lead to loss of vehicle control, which is a leading contributor to 15 passenger van rollovers.

TIRE PRESSURE - Tire pressure should be inspected before every use. Either the owner's manual or some place on the vehicle (commonly in the door jamb of the driver's door) lists the manufacturer's recommended tire pressure. Always follow the manufacturer's suggested tire pressure and never over- or under-inflate. Also, equip all 15 passenger vans with a tire pressure gauge and make sure drivers check pressure before every use.



.....

Under-inflated or overly-worn tires can lead to loss of vehicle control, which is a leading contributor to 15 passenger van rollovers.

.....

TIRE TREAD - Tire tread should also be checked to make sure it is not severely worn down. Accurate records should be kept of tire age (tires deteriorate over time regardless of use). Make sure to check your owner's manual to see when specific tires need to be replaced. In order to check the age of a tire check the DOT date code, located on the inboard sidewall of the tire. This code will verify when the tire was manufactured.

SPARES - Make sure spare tires are appropriate for the specific 15 passenger van model. New looking spares may actually be quite old, and tires deteriorate over time, regardless of use.

Cargo

Misplaced cargo is often a contributing cause in 15 passenger van rollovers. Due to a 15 passenger van's high center of gravity, cargo should always be placed near the center of the vehicle and in front of the rear axle. Cargo should never be placed on the roof. 15 passenger vans should never be used to tow anything.

SAFETY EQUIPMENT - Every 15 passenger van should come equipped with certain safety gear to allow drivers and chaperones to respond to various emergencies and situations that arise.

BASICS INCLUDE:

- First Aid Kit
- Maps and Atlases
- Emergency Contact Information
- Cell Phone (should never be used when driving)



DRIVER DISTRACTIONS

Cell Phones

Driving 15 passenger vans requires a high level of attention, and cell phones provide an unnecessary danger and distraction. For this reason, the use of cell phones should be strictly prohibited at all times while driving.

CALLING - The use of cell phones by 15 passenger van drivers should be prohibited. Some states have bans on the use of talking on cell phones while driving. Regardless of state laws, 15 passenger van drivers should not use cell phones while driving.

TEXT MESSAGES - Many states have, or are in the process of enacting, laws banning the transmission of text messages or emails while driving. Regardless of what the state law is, drivers, especially 15 passenger van drivers, should be prohibited from sending or reading text messages while operating a vehicle.

Directions

GPS DEVICES - Programming and looking at these devices can create distractions for drivers. If necessary, they should be pre-programmed for the intended destination and give vocal directions. If other chaperones are in the vehicle they should be responsible for reading and giving directions.



Food

Eating while driving also poses a major distraction and should be avoided. If eating is necessary, pull the vehicle over to a rest stop or safe area and eat there.

Other Passengers

Passengers pose a distraction to 15 passenger van drivers for a number of reasons. It is important for drivers to remain focused on the road and not become involved in what is happening amongst the passengers. The best way to avoid distractions from passengers and assure passenger safety is to provide drivers with a chaperone to help supervise the passengers and help keep the driver's focus on the road.



DRIVER SCREENING

Age Requirements

All drivers of 15 passenger vans must be at least 21 years old and have a minimum of 5 years of licensed driving experience.

Valid Drivers License

All 15 passenger van drivers must possess a valid driver's license for state of residence (a commercial driver's license is ideal).

Driving Frequency

Drivers should have driven 10 hours or a minimum of 400 miles in the preceding quarter.

Motor Vehicle Records (MVR)

All acceptable drivers have MVRs that meet the following guidelines:

- The driver has no major violations within the last 5 years; and
- The driver does not exceed any of the following guidelines:
 - » Two Minor and no At-Fault accidents in the past three years ; or
 - » One At-Fault accident and one Minor violation in the past three years
 - » Three no At-Fault accidents in five years



.....

All drivers of 15 passenger vans must be at least 21 years old and have a minimum of 5 years of licensed driving experience.

.....

MAJOR VIOLATIONS INCLUDE

- Driving under the influence of alcohol or drugs, including implied consent
- Driving without owner's consent
- Failure to obey or eluding an officer
- Falsifying an accident report
- A felony involving a motor vehicle
- Failure to stop or leaving the scene of an accident
- Intoxicants or drugs in a vehicle
- Larceny involving a motor vehicle
- Operating with no license or on a suspended or revoked license
- Racing or exhibition driving
- Reckless driving or operating without regard to safety
- Unlawful use of a drivers license
- Vehicular manslaughter, homicide, or assault
- Speeding in excess of 20 or more miles over the posted speed limit
- Careless and/or imprudent driving

MINOR VIOLATIONS INCLUDE

All moving violations except those defined as major violations.

Note: The failure to fasten safety belt and the child safety restraint are non-moving violations.



DRIVER TRAINING

One of the most important measures in preventing 15 passenger rollovers and accidents is to put all drivers through training. Understanding how 15 passenger vans differ from regular vehicles is an important skill all drivers must possess. The best way to train individuals how to safely operate 15 passenger vans is to provide actual behind the wheel training from an experienced driver. Topics that should be addressed during 15 passenger van driver training should include most, if not all, of the following topics:

DEFENSIVE DRIVING SKILLS: Driving defensively means

- » Giving other vehicles the right of way
- » Not frequently passing other vehicles
- » Driving below the speed limit
- » Staying primarily in the right lane
- » Avoiding all aggressive driving maneuvers.

SPEED MANAGEMENT: Posted speed limits are safe for cars but not for 15 passenger vans. Always reduce your speed below the posted speed limit for all posted turns and poor road conditions. Never exceed 60 MPH.

EXTREME DRIVING CONDITIONS: This includes ice/snow/rain/wind. Always check the weather forecast prior to any trip. If conditions are unsafe be prepared to cancel the trip. If conditions are unfavorable leave early to avoid rushing.



.....

*Always reduce your speed
below the posted speed limit
for all posted turns and
poor road conditions.*

.....

CENTER OF GRAVITY & WEIGHT DISTRIBUTION: 15 passenger vans have an extremely high center of gravity due to their design and shape. This factor makes them susceptible to deadly roll-overs. The more 15 passenger vans are loaded, the higher the center of gravity becomes. Because of this high center of gravity it is important to disperse the load evenly and to avoid making any quick or sharp turns at high speeds.

SPACE MANAGEMENT: Always maintain a safe cushion of space around the van at all times. Drive in the right lane whenever possible. In good weather conditions keep 4 seconds behind other traffic and 6 seconds when the conditions are bad. This means it should take that many seconds before the front of your van reaches a point passed by another car.

TURNING RADIUS: Due to its length, a 15 passenger van has a much wider turning radius than an average vehicle. As a result, it takes much more room to turn a corner. It is recommended that all drivers practice turns so they can become more familiar with the dynamics of turning 15 passenger vans.

LANE CHANGES: Changing lanes requires significantly more space and a greater reliance on the side mirrors due to the increased length and width of 15 passenger vans. All drivers should minimize the number of lane changes and recognize that 15 passenger vans are sensitive to abrupt steering maneuvers.



.....

*In good weather conditions
keep 4 seconds behind other
traffic and 6 seconds when
the conditions are bad.*

.....

PARKING: Since 15 passenger vans are much longer than average vehicles they will not fit in standard parking spaces. Also, due to the difficulty associated with backing 15 passenger vans, parking spaces should enable the driver to pull forward when leaving the spot. When parking on a hill the driver should turn the wheels so the van will roll against the curb. The parking break should always be set, the transmission gear should be in park, all accessories should be off, and all the windows should be closed.

BACKING: Large blind spots can make backing up very difficult in 15 passenger vans. These blind spots are due to both size and design. Drivers should learn the importance of using a spotter, backing techniques, and handling the vehicle while backing. Also, drivers should understand the importance of proper vehicle positioning prior to backing and proper mirror adjustments.

LOADING AND UNLOADING PASSENGERS: Passengers should be seated closer to the front of the van and evenly distributed from side to side. Drivers should exercise good judgment on where to safely load and unload passengers. Choose locations where passengers do not have to cross traffic. Using a spotter when loading and unloading is recommended to keep passengers safe.

EMERGENCY MANEUVERS: One of the biggest contributors to 15 passenger van roll-overs is over steering during emergency situations. Due to inattention or fatigue, drivers who veer off the road or into another lane will quickly attempt to correct their driving back onto the road resulting in a roll-over. Drivers should be instructed in this situation to remain calm, reduce their speed, and gently ease the van back into position.

ANIMAL HAZARDS: Animals pose a greater hazard to 15 passenger vans than other vehicles. Swerving or abruptly breaking can cause the van to lose control and can result in a dangerous rollover. Use high beams when possible to spot animals. Be alert; when there is one animal there is often more.

BRAKING: 15 passenger vans require significantly longer braking times than normal cars. The more weight, the longer it takes to stop. The higher the speed, the longer it takes to stop. Abrupt or sudden breaking can cause the vehicle to lose control. Always allow ample time before stopping or slowing a 15 passenger van.

SKID CONTROL & RECOVERY: If the driver of a 15 passenger van finds themselves in a skid due to water or ice it is important that they are trained to not break or turn the steering wheel, but instead to ease off of the accelerator and gradually reduce speed. If it is necessary to stop quickly, light pressure should be applied to the brakes. Never pump the brakes in a vehicle equipped with anti-lock brakes.

PRE-TRIP CHECKS: Before embarking on a trip in a 15 passenger van it is important to make sure the vehicle is in the best possible condition to reduce the risks of some sort of mechanical issue. For more information regarding proper 15 passenger van inspections please refer to the Daily Vehicle Inspections for 15 Passenger Vans section.

PASSENGER SAFETY/PROTECTION: Flares, fire extinguishers, warning signs, cell phones, and roadside assistance contacts are some of the most important safety materials all drivers should be instructed to bring with them on all trips.

.....
*Always allow ample time
before stopping or slowing a
15 passenger van.*
.....

VEHICULAR HYPERTHERMIA: All drivers should understand the dangers of leaving passengers - especially young children and the disabled - in an unattended vehicle. Internal temperatures can rise quickly in a vehicle and cause severe harm and even death.

ROADSIDE MAINTENANCE: If a mechanical issue occurs resulting in the vehicle being forced to the side of the road, it is important to keep passengers calm and safe until the situation can be corrected or help arrives. To do this slowly ease the van to the side of the road, turn on the hazards, turn off the engine, and unload the passengers from the van on the side away from traffic and move them to a safe distance until the van is repaired or another vehicle arrives.

NIGHT OPERATIONS: If possible avoid driving 15 passenger vans at night. If nighttime driving is unavoidable it is important to train drivers how to drive safely at night. High beams should be used when possible. Speeds should be reduced. It is also important to make sure the driver is rested and not suffering from driver fatigue.

BLIND SPOTS: The biggest blind spot for 15 passenger vans is directly behind the vehicle. Mirrors should be adjusted so that you can barely see the edge of the van. Mirrors should be scanned every 3-5 seconds. When changing lanes, always check for blind spots by leaning forward to change the angle of sight and then turning your head.

LIGHTS ON FOR SAFETY: It is recommended that 15 passenger vans keep their lights on at all times to increase their visibility and make them more visible to other drivers.

Seat Belt Policy

Drivers should be trained to enforce a rule that seatbelts must be worn by all occupants at all times. Seatbelts should be inspected regularly. If any seatbelts are damaged, missing, or broken they should be replaced immediately. In a 15 passenger van single vehicle crash an unrestrained occupant is 3 times more likely to be killed than a restrained occupant.

Occupancy

Never exceed 15 passengers at any time. If the van has less than 15 passengers, individuals should be placed in seats in front of the rear axle.

Backing Up & Use of a Spotter

15 passenger vans are longer and wider than most commonly driven vehicles, and as a result, they have much larger blind spots. Bright reflective cones should be made available in all 15 passenger vans for drivers to place in front of and behind a parked vehicle. By placing these cones in front of and behind the vehicle the driver is forced to walk around the van and survey the driving conditions. This is particularly helpful when a driver does not have a spotter. With that said, it is best to always make use of a spotter whenever possible.



WEATHER HAZARDS

15 passenger van pose additional hazards compared to regular vehicles and these hazards are compounded during inclement weather. The best way to avoid these dangers is if it is unsafe to drive, don't. Before embarking on a trip during severe weather contact a supervisor to see if the trip can be postponed or rescheduled. Another important aspect of keeping 15 passenger vans safe from inclement weather is to listen to local traffic, road, and weather reports to help determine if the trip is safe. For long distance trips use the National Weather Service to check the weather along the route.

Rain

One of the most dangerous aspects of driving during rain is diminished visibility. 15 passenger vans already have reduced visibility due to their size and the presence of large blind spots. Focusing on keeping the windshield clear can draw focus from other areas and lead to accidents.

WINDSHIELD WIPERS - Make sure all 15 passenger vans are equipped with working windshield wiper blades and that they are replaced frequently to ensure maximum effectiveness.

RAIN-X - The application of Rain-X or similar products can help aid in reducing the accumulation of water on the windshield, which in turn can increase visibility. These products are relatively inexpensive and easy to apply.

AVOIDANCE - If heavy rain is observed or forecasted, canceling or delaying trips can eliminate the hazard.

.....
Focusing on keeping the windshield clear can draw focus from other areas and lead to accidents.
.....

HYDROPLANING

Hydroplaning occurs when a layer of water forms underneath the tires of the vehicle resulting in a loss of traction. This loss of traction causes the vehicle to become less responsive to controls such as steering, braking, and accelerating.

Preventing Hydroplaning

SLOW SPEEDS ON WET ROADS – Increased speeds already increase the risk of rollovers and collision, but combined with wet conditions the risk increases greatly. Reducing speeds decreases the chances of hydroplaning and allows more time to respond.

- Check tire treads regularly
- Check tire inflation

RESPONDING TO HYDROPLANING - What you don't do during hydroplaning can be more important than what you do do.

- Do not brake or turn
- Ease off of the accelerator



.....

*Reducing speeds
decreases the chances of
hydroplaning and allows
more time to respond.*

.....

DRIVING IN FOG

The danger of driving in foggy conditions is greatly reduced visibility. Fog can reduce visibility to 1/4 mile or less. This reduced visibility creates dangerous driving conditions for all vehicles, but especially 15 passenger vans.

POSTPONE - Fog is typically densest in the mornings so delaying trips to late morning or afternoon can eliminate the hazard.

LIGHTS - Keeping headlights on low beam will allow for maximum visibility. High beams will reflect off the fog and impair visibility more.

REDUCE SPEED - Fog can create the illusion of driving slower than in reality. Also with reduced visibility drivers will be less likely to see and react to hazards that may arise.

WIPERS AND DEFROSTERS - Use wipers and defrosters to maintain maximum visibility.

USE THE ROAD - The edge of the road or painted road markings can be used effectively as a guide.

BE PATIENT - Never pass another vehicle during foggy conditions.



.....

Keeping headlights on low beam will allow for maximum visibility. High beams will reflect off the fog and impair visibility more.

.....

DRIVING IN WINDY CONDITIONS

15 passenger van's high, box-like shape and large surface area makes them susceptible to catching strong gusts. Make sure to check weather reports to determine if high wind conditions exist before embarking in a 15 passenger van. Be aware that high wind gusts can be stronger in a metropolitan area. Also, make sure to always keep two hands on the wheel at all times.



DRIVING IN WINTER WEATHER

Snow and ice are the leading causes of weather-related deaths annually. Winter weather can decrease visibility and create slippery, dangerous driving conditions. Driving during extreme winter weather is not advisable, but roads can be dangerous at any time during the winter.

REDUCE SPEED - Stopping will take much longer for 15 passenger vans during the winter months due to slippery road conditions. Always leave at least 3 times the space as usual between the car in front of you.

BRAKING - Brake gently to avoid skidding. If skidding occurs and the wheels lock up slowly ease of the brake.

LIGHTS - Use lights during winter conditions to increase your visibility to other drivers. Bridges and Overpasses - These areas will be the first to freeze and become icy. Even at temperatures above freezing, if wet, these areas can develop ice.

BRIDGES AND OVERPASSES - These areas will be the first to freeze and become icy. Even at temperatures above freezing, if wet, these areas can develop ice.

PASSING - Passing other vehicles in 15 passenger vans is never advisable, but can be even more dangerous in winter weather. Never pass snow plows or sanding trucks. The drivers of these vehicles have limited visibility and the roads in front of them are typically much worse.



.....

Use lights during winter conditions to increase your visibility to other drivers.

.....



THE SILVER LINING®

FIND US ON    