



Church safety solutions

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Common causes of vehicle accidents and how to avoid them

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April – Lightning and electrical safety

For most adults, driving a vehicle is as routine as brushing their teeth. However, just because we can drive from point A to point B does not mean we do so in a safe manner. Everyone on the road is at risk of becoming involved in a vehicle accident. Individuals driving on behalf of their church are no exception.

After analyzing claims data, Zurich has found that more than 35 percent of church vehicle incidents from 2003 – 2007 were due to backing, parking or hitting fixed objects. A possible cause is the driver's unfamiliarity with a church van's maneuverability and blind spots. In addition, driving in a parking area is the most congested environment many of us will encounter each day. However, whether the incident involves a small scratch to the vehicle or striking a pedestrian, a backing or parking accident can be avoided by taking a few extra precautions that will be discussed in this publication.

The severity loss leader for church vehicles involves failure to allow for a safety buffer around your vehicle. For the same five-year period of 2003 – 2007, Zurich paid more than \$6 million due to claims in which a church's driver operated or followed too closely to another vehicle. The most common accidents include:



- The church's driver rear-ending the vehicle ahead
- The church's driver being rear-ended by the vehicle behind
- The church's driver side-swiping an adjacent vehicle

Studies have shown most people think they drive more safely than the average driver does. Logistically, this is impossible. However, by following the guidance provided in this month's Church Safety Solutions, you can reduce your driving risk and practice the ultimate act of charity by possibly saving someone else's life – or your own.

Vehicle backing safety

According to the National Highway Safety and Transportation Administration, backing accidents cause 500 deaths and 15,000 injuries per year. The use of good backing techniques, continued vehicle backing education and practice in a secure site can help prevent these types of accidents. Here are a few pointers to share with your drivers:

- Vans and buses used to transport congregants do not have the same visibility as passenger vehicles.
- Blind spots can extend up to 16 feet in front and 160 feet behind a vehicle.
- Drivers should never depend upon mirrors exclusively while backing.
- Turn your head to both sides to observe blind spots that cannot be seen from your mirrors.
- If necessary, use a responsible adult to help act as a spotter to assist and communicate with the driver and to warn pedestrians to stay clear.

Avoid backing vehicles

- **Plan ahead**
Whenever possible, drivers should **avoid backing vehicles**. Drivers should let passengers off at the front of the church and then drive to a remoter area of the parking lot. The driver should pull the vehicle through parking space and position it to eliminate the need to back up.

When backing is unavoidable

- **Back into parking spaces**
When arriving at a destination, rather than pulling into a parking space, vehicle drivers are encouraged to back into the space. Backing into parking spaces is an industry-recognized best practice, which is used to help avoid collisions while backing. This may seem counter intuitive, but the driver is likely to be more aware of his or her surroundings

and have greater visibility when backing into a parking space. When approaching a parking space, observe the area before attempting to back in. Vehicles that are left unattended should be re-inspected by the driver prior to pulling out of a parking space to avoid collision. Keep in mind that the area surrounding a parked vehicle can change dramatically when the driver is away.

- **Look around the vehicle before backing**
Walk around your vehicle looking for pedestrians and obstacles.
- **Don't assume or anticipate**
Drivers arriving and departing from the same location multiple times per day can be lulled into a false sense of confidence. Drivers must always be alert and prepared to avoid hazards that arise.
- **When the view is obstructed**
Use a spotter when possible. If not, slowly back-up the vehicle a couple of feet and then stop. Before proceeding, check behind the vehicle. Keep doing this until you have finished maneuvering the vehicle.



Maintain a perimeter of safety around your vehicle

The concept is fairly simple in that you should attempt to maintain a safe distance surrounding your vehicle while in traffic to allow yourself adequate time to stop the vehicle or safely maneuver around a hazard.

Following distances - count the seconds

The first step of maintaining a safe following distance from the vehicle in front is to understand what a safe distance should be. Nationally, driver education programs have defined a safe following distance as being between two to four seconds from the vehicle ahead of you. This is largely dependant on the conditions of the road and speed of the vehicle. While opinions vary as to the number of seconds, they all agree upon the concept of a safe distance. To determine how maintain a safe distance use the following tips:

- Drivers should never talk on cell phone while driving as this distraction can delay reaction time to brake the vehicle.
- Gauge your distance from the vehicle ahead of you by counting the number of seconds it takes you to pass a fixed point the lead vehicle just passed. Count to yourself "one-one-thousand, two-one-thousand" ...If you reach the same point before you have finished counting at least to "two-one-thousand" you should increase the distance between the vehicle ahead of you by gradually slowing down.
- As a rule, a two-second following distance is the minimum distance a car should maintain when following another car when road and environmental conditions are good. You should add one more second for each of the following: if you are driving a large occupancy van or bus, for inclement weather conditions, if you are following a motorcycle, if the vehicle behind you is tailgating your vehicle.

Don't drive next to another vehicle

Many drivers are unaware they may be riding in another driver's blind spot and, as a result, don't leave themselves an escape route to avoid collision.

- Do not drive inside of someone's blind spot. If you cannot see the eyes of the other driver, chances are they cannot see you.
- Try to leave an "out" on either side of your vehicle. This includes driving lanes or road shoulders on either side.

Tailgating drivers

Tailgating is an aggressive and dangerous behavior. Drivers who encounter tailgaters should simply signal, change lanes and let the driver pass through without confrontation. If you are on a two-lane road or otherwise are unable to move over to the right safely, slow down slightly below the normal flow of traffic speed and increase your own following distance to the vehicle ahead. Slowing down will make it easier for your tailgater to pass you when it is possible to do so. Increasing your own following distance takes into consideration the reduced reaction and braking time of your tailgater. Your increased cushion will allow you to brake more gently and reduce the chance of the tailgater rear-ending your vehicle.

Do not tap or slam on your brakes. Both actions will only worsen your situation. Ignore honking and rude gestures. Don't respond or make eye contact. If you can do so safely, contact police with the vehicle description, license number, location and direction of travel.

Current stopping distance requirements for medium and heavy-duty vehicles (NHTSA)

Vehicle type	Stopping distance from 60 mph, empty	Stopping distance from 60 mph, loaded
Buses (including school buses)	280 ft	280 ft
Single unit trucks (except buses)		
• Weight > 10,000 lbs	335 ft	310 ft
• 8,000 - 9,999 lbs	242 ft	216 ft
• 7716 lbs - 7,999 lbs	216 ft	216 ft
Truck-tractors	335 ft	n/a
Truck-tractors with unbraked control trailer	n/a	355 ft
Semi-trailers, trailers, and converter dollies	Dynamometer requirement	Dynamometer requirement

Rural accidents

According to the National Highway Transportation and Safety Administration (NHTSA), "Only one-fifth of the nation's population lives in rural areas, yet two-fifths of the vehicle miles traveled and three-fifths of all fatal crashes occur there."

The reasons for the higher incident rates of fatal crashes in rural areas can be attributed to:

- Lower seatbelt use.
- Environmental conditions (roads are sometimes not as well maintained, less wind blocks, wildlife – deer and other animals and weather conditions).
- Scarcity of public transportation.
- Greater distances between destinations.
- Speed limits of 55 mph or higher on rural roadways.
- Tendency to have more curved roads.

What can churches do to help combat this trend?

- Always require the use of seatbelts for adults and child restraints for age appropriate passengers.
- Make sure your vehicles are in good working condition, observing all recommended maintenance checks.
- Only allow licensed and insured adult drivers to transport congregants.
- Avoid driving during inclement weather, if possible.
- Instruct your drivers to drive the speed limit if driving conditions are good. Drive slower during inclement weather or if driving conditions are poor.
- Vehicle drivers should be well rested before driving on rural roads.
- Prepare to yield the right of way at uncontrolled intersections. Even if you have the right of way, vehicles approaching the intersection may be traveling at a high speed and may not easily see their yield or stop sign.



Child restraints

Currently, all 50 states have laws requiring children traveling in motor vehicles to be restrained in federally approved child restraint devices (e.g., infant or child safety seats) appropriate for the child's size and age. According to the CDC, when child restraints are correctly installed and used, child safety seats reduce the risk of death by 70 percent for infants and 47-54 percent for toddlers and reduce the need for hospitalization by 69 percent for children aged four years and younger.

Child safety seats save lives, but they must be correctly installed. Thankfully, the National Highway Traffic Safety Administration, National Transportation Safety Board, and the National Safety Council have joined with others to form SeatCheck.org. SeatCheck is a national campaign to help parents and caregivers properly secure children in motor vehicles. SeatCheck.org can help you make sure your car seat is installed correctly. For more information:

- Call **866-SEAT CHECK (866-732-8243)** to get information on **free child safety seat inspections**. Information is available in Spanish and English.
- Visit [SeatCheck.org](https://www.seatcheck.org) to find a **free child safety seat inspection** site near you. The site is also available in Spanish.

Also, observe the child restraint laws in your state. Insist that drivers who are operating a vehicle for church purposes use infant and child seats as required in your state. Children who are close to the age or weight cut-off points may be allowed by their parents to forego use of child seats. Also, some parents may allow their children to ride in the front seat before they meet state age and weight requirements. While you cannot control whether a parent chooses to follow state laws, you can require all drivers and passengers who are in a vehicle for church activities to obey child restraint and seating laws.

Lessons of Loss

The following “Lessons of Loss” are summarized from a recent study completed by Zurich. The details have been revised to help preserve the anonymity of those involved.

1 Intersection rear-end collision

It was snowing at the time of the accident, which had created decreased visibility and slick driving conditions. Heading east from a side street, the driver of a church van came to a stop at a "T" intersection, looked both ways and then proceeded to make a left turn heading north onto a 50 mile per hour two-lane highway. The stop sign was the only form of traffic control at the intersection.

A side road angled left into the intersection, which caused the van driver to strain to look south over his right shoulder and blind spot of the vehicle. At the stop sign, the driver stated that he looked, but did not fully have clear sight of northbound traffic, the direction he intended to turn. As such, the church van driver took the risk and assumed he had a clear right of way. As the van driver made the northbound left turn and established his lane of travel, he was struck from behind by a northbound motorcyclist who was traveling at about 50 miles per hour. The motorcyclist was ejected from the vehicle and skidded for a half a block. The motorcyclist's helmet came off during the skid, which resulted in head trauma. Emergency services were summoned and proceeded to transport the motorcyclist via ambulance to a local emergency room where he was treated for a life-threatening head wound and subsequent coma.

The driver of the church van was able to drive away from the scene, but later went to the hospital complaining of head and neck pain. The resulting injury did not cause any long-term medical problems for the van driver. The Highway Patrol issued a citation to the van driver for failure to yield the right-of-way to the motorcyclist. The cost of the claim is in excess of \$500,000.

2 Tailgating

The treasurer and pastor of a local church were traveling along a highway in a church-owned bus. As they were traveling in the center lane of traffic, another vehicle began tailgating them and making hard maneuvers in an attempt to pass. The tailgating vehicle accelerated in an attempt to pass the church bus on the left lane, but misjudged the distance and struck the church bus in the rear causing the bus to spin out of control and strike the other vehicle twice. After jumping the median and injuring three passengers, the bus came to a crashing halt on its side. One passenger's face struck the windshield, causing her eyes to become swollen shut and breaking her nose. Another passenger incurred a neck injury and a third passenger broke a leg.

Lessons Learned:

1 In the first accident, the van driver should have anticipated that entering a highway with higher speeds – especially on a snowy day – would require extra caution. The intersection was not controlled through traffic lights, which required better judgment on the part of the van driver when it would be safe to proceed onto a fast moving highway. The intersection had limited visibility due to the angle approaching the highway, which created a blind spot for merging traffic. As inconvenient as it may seem, the van driver could have avoided the accident by traveling a few more blocks to a controlled traffic light or proceeding into the intersection with caution to gain better visibility.

2 The bus driver in the second scenario stated that he observed the other vehicle making erratic moves in his rear-view mirror and decided to ignore these actions. The bus driver could have signaled, slowed down gradually, changed lanes and permitted the tailgating driver to pass safely. Remember, tailgating is an aggressive and dangerous behavior.

References

Zurich – Driving to Success

National Highway Transportation Safety Administration (NHTSA)
<http://www.nhtsa.gov>

National Highway Transportation Safety Administration (NHTSA)
<http://www.seatcheck.org/>

Center for Disease Control (CDC) – Motor Vehicle-Related Injuries
<http://www.cdc.gov/health/motor.htm>

Additional Prevention Resources:

Work Related Roadway Crashes – Challenges and Opportunities
for Prevention
<http://www.cdc.gov/niosh/docs/2003-119/pdfs/2003-119.pdf>

NIOSH—Motor Vehicles:
<http://www.cdc.gov/niosh/topics/motorvehicle/>

Federal Highway Administration:
<http://www.fhwa.dot.gov>

National Highway Traffic Safety Administration:
www.nhtsa.dot.gov

National Highway Transportation Safety Administration advisory on
15 passenger vans
[http://www.nhtsa.dot.gov/cars/problems/studies/15PassVans/
15PassCustomerAdvisory.htm](http://www.nhtsa.dot.gov/cars/problems/studies/15PassVans/15PassCustomerAdvisory.htm)

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