

#### STATISTICS

"Vehicle collisions often occur at intersections because these are the locations where two or more roads cross each other and activities such as turning left, crossing over, and turning right have the potential for conflicts resulting in crashes." – National Highway Traffic Safety Administration (NHTSA)

"43% of motor vehicle crashes occur at intersections or are "intersection-related. " US Department of Transportation (USDOT) statistics

"Intersections constitute only a small part of the overall highway system, yet intersection-related crashes constitute more than 50 percent of all crashes in urban areas and over 30 percent in rural areas" – American Association of State Highway and Transportation Officials (AASHTO)

# INTRODUCTION

If all vehicles moved along in the same direction and never encountered other lanes of traffic, including crossroads, driving would be a lot less complicated. Unfortunately, drivers must cross the paths of other vehicles (and pedestrians/cyclists), and that's when driving gets tricky.

Left turns, right turns and simply getting across the intersection can present trouble to even the most seasoned drivers. Three-way intersections ("T" intersections), traditional cross streets and multiple cross roads (at odd angles) each present opportunities for collisions from turns and misunderstandings between drivers. Add to this poor signs, a lack of control devices (including drivers who run stop signs or ignore red lights), view blocks (hills, curves and/or buildings, etc.) and you can easily see why intersections are prime places for collisions.

Intersection collisions typically involve one vehicle's front bumper hitting another vehicle in one of three areas: the front quarter panel, the front or rear doors or the rear quarter panel. This is important since these areas on most cars, vans, and trucks are very lightly protected from crash impacts. The amount of costly and injury producing damage is often high even in low speed crashes.

Other types of collisions at intersections include: rear end collisions (hitting stopped vehicles from behind) and pedestrian impacts.

Drivers who approach each intersection with an attitude of caution usually have little problem detecting those drivers who are at risk of causing an accident by their carelessness.

# WHY DO THESE COLLISIONS HAPPEN?

There are a number of factors that contribute to these collisions.

- Poor road design. Simple design changes such as including a left turn lane can make a big difference. According to the Federal Highway Administration (FHWA); "Studies have shown that providing turn lanes for leftturning vehicles can reduce accidents by 32 percent." Some roads have stop signs where traffic signals would be a better choice; others have signals where signs might be a more effective solution. Municipalities are working with traffic safety agencies to address intersection redesign; however, a "standard" set of designs could not be applied throughout the USA effectively since each intersection is unique.
- 2. Drivers couldn't see approaching traffic until too late. Sometimes the intersection or the roads leading to the crossing have view blocks that make it hard to see oncoming traffic. This could cause drivers to react much too late to cross traffic or pedestrians that couldn't be seen until the last moment. Some intersection crashes occur during poor visibility conditions and during late night/early morning hours when visibility is greatly reduced.
- 3. **Mismatch in relative speed on intersecting roads**. Many rural intersections involve low speed secondary roads crossing multilane, high speed expressways. This can be especially challenging for drivers who are trying to judge oncoming traffic speed if the expressway is not required to stop for cross traffic. Low light or poor weather conditions make it even harder to cross the expressway.
- 4. Inadequate driver training or aggressive, risk-taking behaviors. Some drivers may not understand various pavement markings or traffic control signs that govern the proper movement of traffic through the intersection. Some drivers may even disregard the signs and not stop at all.

# FIRST MINIMIZE YOUR OWN DISTRACTIONS AND SCAN YOUR SURROUNDINGS

Start by minimizing your own distractions and increasing your visual scanning of the area when approaching intersections Be sure to pay attention to your surroundings. Watch for cross-traffic even if you have the "right of way" or "green light". Be alert for pedestrians to act in an unpredictable manner – they may look right at you and still step out into the lane.

# Signal Controlled Intersections

- 1. Follow the rules carefully—slow down (prepared to stop if safe to do so) on the caution yellow light, come to a full stop on the red light, and go only after the light is green.
- Remember to check to the left and right before pulling into the intersection even after receiving a
  green light there may be a driver in a rush trying to beat the light who could cause a serious crash if
  you assume that the path is clear.
- 3. Dark or malfunctioning traffic lights are treated as a FOUR-WAY STOP SIGN CONTROLLED INTERSECTION.
- 4. Sometimes an intersection is governed by a single flashing light (yellow or red). Generally, drivers should treat flashing red lights as a <u>STOP</u> sign and flashing yellow as a <u>CAUTION</u> ~ "watch for cross traffic as you proceed" across the signal; however, check your local and state regulations affecting this type of signal situation. Never assume that cross traffic will act predictably or even sensibly. <u>Expect the unexpected!</u>



# Sign Controlled Intersections

Intersections governed by Stop Signs may be two-way stops (one road has priority over the other) or fourway stops (both roads must stop and look for cross traffic before proceeding).

If you are approaching an intersection that does not require you to stop, be cautious – cross traffic may not see your vehicle, may make unexpected moves or may simply dart out across your path because they are nisiudged your speed

In a hurry or misjudged your speed.

Always stop at stop signs. If your ability to see oncoming traffic is blocked, edge forward only after coming to a complete stop. It is your responsibility to be sure that it is safe to cross the intersection before moving.

# Traffic Circles, Rotaries, and Roundabouts

An Insurance Institute for Highway Safety (IIHS) study found an 80 percent reduction in injury crashes at roundabouts converted from stop signs or signals. These modified intersections reduce speed, but allow greater efficiency over traditional intersections. Many people are unfamiliar with these designs and it may be initially confusing. Drivers who have more experience navigating roundabouts are familiar with looking to their left and yielding to vehicles that are already in the roundabout lane.

Studies show that there are fewer points where vehicles can collide with each other at roundabouts as compared to traditional intersections, and because vehicle speeds are lower, injuries are far less common than with traditional intersections.

# **SUMMARY**

Once you commit to crossing an intersection, clear the area quickly – especially if you are pulling a trailer.

The Georgia state driver's manual (available free at Department of Driver Services web sites or offices) will provide additional guidance on dealing with special situations and odd intersection arrangements that may be unique.

It is your responsibility to know what to do, and then to do it consistently. Post accident arguments over who had the *"right of way"* offer little or no consolation when people are hurt and vehicles are damaged.

Remember, the driver who is likely to avoid collisions at intersections is:

- Observe all traffic regulations all the time
- Always approach intersections slowly and with caution

Your vehicle should always be under control and the driver should allow adequate time to evaluate each situation



