

New insights into holiday driving dangers with UA electronic crash data

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The Holiday Season is upon us, and many of us will be driving at times and in areas that are new or different from what we normally do.

A recent University of Alabama-study used data from the recently-developed electronic crash [reporting system](#), or eCrash, to obtain new insights into the dangers.

The eCrash system was developed by the UA Center for Advance Public Safety, or CAPS, under leadership provided by the Alabama Department of Public Safety.

“The new data elements within eCrash enable us to gather insights that we could not do with the previous paper-based entry system,” said Dr. Allen Parrish, director of CAPS. “For example,” Parrish said, “for the first time we have a specific entry in the eCrash system for deer strike collisions – something that was not available in the old system.”

“There were 71 deer-strike crashes in the 2009 Thanksgiving week, which is almost five times the number of deer-involved collisions that typically occur the rest of the year,” said Dr. David Brown, deputy director of CAPS, who performed the study.

“Our study compared Thanksgiving week crash data to that for the rest of the year and was able to detect a number of factors that are different for that week – the number of deer strikes being one of the most significant,” Brown said.

He attributed this to several factors:

- The fact that rush hour during Thanksgiving week occurs right at dusk, since most deer strikes occur soon after dark;
- The increased number of people [driving](#) at this time since this is also the time when they are leaving for their visits with friends and relatives;
- Increase deer activity due to the start of the gun hunting season just a week or so prior to Thanksgiving; and
- People driving in areas that they are not totally familiar to them.

Among other factors that stood out was the change in the time distribution for 2009.

“For many years, we had been seeing the trend of people taking the entire week off, or at least leaving on Monday or Tuesday on the trips; in 2009 there was a return to what we saw in the 1990s with people waiting until Wednesday to leave,” Brown said.

There were 400 crashes on the Wednesday before Thanksgiving, making it the second highest for crashes on Wednesdays throughout the year.

Overall crashes for the 2009 Thanksgiving week included a totally of 2,025 crashes leading to 602 injuries and 13 fatalities.

Brown noted: “It is interesting to see how the time trends of crashes reflect the times that people are traveling prior to Thanksgiving – looking at hours with 20 or more crashes, the concentration is 2 to 7 PM on Monday, and it shifts back to 1 to 7 PM on Tuesday; then on Wednesday it is even earlier – from 10 AM through 7 PM. The Wednesday numbers continue to be relatively high right into the night and into Thursday early morning.”

“Thanksgiving day itself, however, is the best day of the week to be on

the road – it only had about half of the crashes that occur on the Wednesday before it,” according to Brown.

Other factors that he noted were of interest during the Thanksgiving week include the following:

- The most frequent and the most deadly are crashes between two vehicles – close to 700 crashes.
- Alcohol and drug-related crashes also tend to be much more severe, with considerably more in the late night holiday weekend hours when emergency medical services might be unavailable due to the demands placed on them.
- Over double the expected crashes at four-way intersections, probably due to people driving in areas unfamiliar to them.
- Weather was not a factor in 2009 as we have seen it be in other years – when it is a factor it tends to skew the results, especially in the time distributions.
- SUVs, vans and mini-vans were the most over-represented vehicles, showing the increased involvement of family travel.
- Distractions from the use of cell phones or other electronic devices were reported to be several times what was reported for the rest of the year.

Parrish also offered some key safety recommendations for driving during the holidays:

- Do not drive while intoxicated, do not ride with others who are intoxicated, and avoid the obvious times and places where you might become the victim of drunken driving;
- Always wear your seat belt, regardless of how long the trip;
- Keep children properly restrained in the back seat;
- If you have to use a cell phone or other electronic device, find a good place to pull over – it might cost a couple minutes, but it could save the

life of your kids;

- Keep the speed down – every 10 miles per hour doubles your chance of being killed in a crash;
- In rural areas, watch for deer, especially in the hours right after dusk;
- Watch the weather reports, and plan your trip accordingly; and
- Be acquainted with traffic problem areas and avoid them.

“Driving does not have to be dangerous,” said Parrish. “If you keep these safety basics in mind, you will cut your chances of being killed in a car crash to a very low probability.”

Provided by University of Alabama

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