

Opening Remarks – NTSB Passenger Vehicle Tire Safety Symposium

By Roderick Koehler, American Center for Van and Tire Safety

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Good morning. My name is Roderick Koehler. I'm with American Center for Van and Tire Safety. I'm a retired mechanical engineer and I'm here this morning for a couple of reasons. First, to explain my interest in tire safety and, second, to spell out what I'd like to see happen as a result of the information gathered and discussions held during this two-day symposium.

Seven-and-a-half years ago I became acutely aware of the importance of tire safety. On the morning of July 17, 2007, my 10-year-old granddaughter, Alexis James—or “Lexie” as we called her—was traveling with good friends of our family in their 15-passenger van. They were on their way from Greenville, South Carolina, to Savannah, Georgia. Lexie played softball with the daughter of our friends, and the girls were on their way to participate in a tournament. It was a beautiful clear day. They were on I-26. The road was dry. Driving conditions could not have been better. At about 12:30 PM, just south of Columbia, the left rear tire suddenly lost its tread. The van went out of control and rolled several times. Although Lexie was wearing her lap belt, she was ejected and killed. No one else in the van was ejected or seriously injured.

A short time after her death, I began researching 15-passenger vans and tire tread loss. I soon discovered that 15-passenger vans have been plagued with a variety of safety issues since their introduction in the mid 70s. I also found that tire tread loss could reportedly occur due to manufacturing defects and, in some cases, tire aging and related component oxidation and degradation.

As the investigation into the accident by the authorities progressed, I learned that the tire that failed was 13 years old. I then found out that our friend, who owned the van, had taken it in to have the tires checked and replaced as needed prior to the trip. The service tech suggested that, since the spare appeared to have never been used, it should be put into service. It was the original spare for the 1994 van. They mounted it in the left rear position and matched it with a new tire on the right rear. There was no mention of tire age or any possible risk. It was that tire that failed and led to the death of my granddaughter.

Shortly thereafter, my son-in-law, Patrick James, and I formed American Center for Van and Tire Safety. We met with a variety of state and federal legislators, the National Highway Transportation Safety Administration, many highway safety advocates, and virtually anyone else who would listen to our story and help us find a way to improve 15-passenger van and tire safety. We started a website and were soon doing what we could to push for legislative and regulatory actions to improve van and tire safety. We also developed a set of safety guidelines and promoted awareness of the inherent dangers to church groups, youth athletic associations, community groups, and anyone else we could find. Fifteen-passenger van and tire safety became my life's passion.

In the last decade, there have been great strides in improving 15-passenger van performance. Through additions by the vehicle manufacturers, expanded NHTSA regulations, state and federal legislation limiting some uses, and greater overall public awareness, occupant fatalities in 15-passenger van crashes have dropped from 127 in 2003 to 36 in 2012. These are amazing strides, yet there were still 36 lives lost in 2012.

NHTSA started looking into tire aging after the Ford/Firestone problems in the early 2000s. In a 2007 report to Congress, the agency said "... it is difficult to estimate, based on crash statistics currently available, how many crashes are caused specifically by tire aging. However, we do know that tire aging is a significant factor in tire related safety." In March of this year, NHTSA issued a summary report on its investigation into tire aging. In this report, it said, "Tire aging is a phenomenon involving the degradation of the material properties of a tire which over time can compromise its structural integrity and jeopardize its performance. Tire aging takes place whether a tire is driven or not and for this reason is a concern for spare tires and tires that are not regularly driven."

What I'm asking is that all the groups come together to establish reasonable guidelines on tire aging. I would then like to see an educational program put in place so that everyone is on the same page, including tire manufacturers, tire retailers, tire and vehicle service techs, state vehicle inspection personnel (in states with vehicle inspections), and consumers. As part of this, either the tire manufacturers need to modify their tire identification numbering system so that the manufacturing date is clearly identifiable by the average consumer or the consumer must be more thoroughly educated to know exactly how to find the manufacturing date in the current TIN. Currently the vast majority of consumers still don't know how to determine the age of a tire. Ideally, in the future when a passenger vehicle is brought in for routine service and "multi-point" inspection, the service tech will not only tell the consumer the remaining tread depth but also the remaining life of each tire.

On a somewhat related note, in late 2012, the subject of passenger vehicle tire recalls caught my attention. This was after Michelin announced the recall of approximately 800,000 B F Goodrich and Uniroyal Laredo tires used on light trucks and vans, including 15-passenger vans. This led me to look into tire recalls in general. As a result, I came to find out that over the past several years less than 20% of recalled tires are actually returned to a dealer for inspection and/or replacement. Tire registration is a primary issue. While in the new car market, tires are automatically registered with the tire manufacturer after the sale. In the replacement market, the dealer is supposed to give the consumer a registration card at the point of sale. The responsibility then falls on the consumer to complete the registration card and return it to the manufacturer. If either of these does not happen, the tires are not registered, and there is no way for the tire manufacturer to notify the consumer in the event of a recall. The issue of tires on used cars and the sale of used tires further complicate the problem of recall notification, as none of these tires are registered to their current owners. To make matters worse, there is no national database for consumers or service techs to enter a tire's TIN to see if the tire has been recalled. All these facts contribute to the low return rate.

There needs to be improvement in the tire registration and recall process to substantially increase the return rate. NHTSA needs to put a national database in place so that anyone can simply input a TIN and determine if the tire has been recalled. If this were in place, consumers could periodically check their own tires. When buying a used car or used tires, one could determine if those tires were recalled. Service technicians could routinely check tires for recall whenever a vehicle is in for service and advise the customer accordingly.

Lastly, the consumer must be made to understand the importance of becoming much more knowledgeable and involved in tire maintenance. Nothing is more important than tires for the safe operation of a passenger vehicle. The very lives of the vehicle's occupants may depend on them. In the past, RMA issued a brochure on consumer tire maintenance telling the consumer to be tire smart and to play their "PART," which stands for **Pressure-Alignment-Rotation-Tread**. Many tire manufacturers now include tire maintenance and safety information in their manuals. These safety recommendations are good; however, they need to be expanded to include tire age and checking for possible recalls. Consumers should be taught to get in the habit of checking their tires monthly. And, whenever they take their vehicle in for routine service, they need to request that the tires be inspected for proper pressure, signs of uneven wear, cracks or other visible defects, age, and whether the tires have been recalled. This should all become routine. When buying tires, the consumer needs to be certain to buy tires that are the correct size and rating. If buying just a pair of tires, they should always be installed on the rear. The safest tires should always be on the rear as the failure of a rear tire is more dangerous and more difficult to control than the failure of a front tire. Always ask the dealer the age of the new tires; if he doesn't know or says it doesn't matter, go to a different dealership. If the tires are more than a year old, don't buy them. If buying used tires, don't buy any tire over six years old and check each for recall status.

Tire education should begin early. In fact, a section on tires and tire safety should be included in every state driver's manual. Just as manufacturers, dealerships, and service garages have responsibility for tire safety, the consumer must also accept certain responsibilities for tire safety, as I have just outlined.

For the years 2010 through 2012, according to NHTSA's Fatality Analysis Reporting System, there was an average of 538 occupant fatalities per year in passenger vehicle crashes when a "contributing circumstance" was tires. For those same years, there was an average of 236 occupant fatalities per year in passenger vehicle crashes when the critical pre-crash event was a "blow out/flat tire." It is unknown how many of these resulted from the failure of an over-age tire or a recalled tire. NHTSA has said that "based on data from 2005 to 2006, they estimate that with pre-FMVSS 139 tires, 90 fatalities occurred annually as the result of crashes that were probably caused by tire aging or where tire aging was possibly a significant factor." It has released no estimates of fatalities related to tire aging with FMVSS 139 compliant tires.

Surely, we can do better in addressing the issues of tire aging and tire recalls. If the suggested actions can be implemented, I believe tire-related crashes and related fatalities will go down. Every death that is prevented will be one less family that has to go through the unimaginable tragedy that my family has endured. Let's help make a difference and begin addressing the issues which will prevent American families from needlessly losing a loved one in a tire-related passenger vehicle crash.

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