

Wheels: Beth of Miamisburg asks, “The left rear tire on my two-year old SUV failed while on a trip. The entire tread separated from the rest of the tire. This was very scary and I do not want anything like this to happen again. What, if anything, can be done to prevent tire failure?”

Halderman: A tire failure of any kind can be very serious and could have caused a lack of control, especially since the failure occurred on the rear. If a front tire fails, the driver has direct control and can in many cases keep the vehicle under control. However, Beth was lucky that just the tread came off and the rest of the tire held air as the driver only has indirect control of the rear wheels. The steering wheel only controls the position of the front wheels. To help prevent tire failures in the future, perform the following every month:

1. Check tire pressures. Tire pressures decrease over time and when the outside air temperature decreases, tires lose one pound per square inch (psi) of air pressure for every 10 degrees of drop in temperature. For example, if the tire pressure was checked in September to be 32 psi on an 80 degree day, the tire would measure 27 psi on a 30 degree day (80 minus 30 equals 50 degrees) even if the tires did not lose air.
2. Check the tire for signs of damage or wear. Check that the tread depth is greater than 2/32 of an inch. (Note to readers: Now many experts are recommending that the tires be replaced if the tread depth is less than 4/32 of an inch – double the older recommendation based on studies that show a decrease in handling on wet road surfaces. Tire Rack (www.tirerack.com) recommends that the tires have at least 6/32 of an inch of tread depth for safe operation over the winter months.)
3. Check the owner’s manual and/or door placard to see if it requires a higher pressure if the vehicle is fully loaded and/or traveling at highway speeds.

Wheels: A related question could be if only new tires are purchased, where should they be installed – in the front or rear?

Halderman: Because the driver has direct control of the front wheels, most experts recommend that the best or newest tires be placed at the rear.

Wheels: What about using winter (snow) tires?

Halderman: Because winter tires can cause the vehicle to handle differently from summer or all-season tires, most experts recommend using winter tires at all four locations. Using separate wheels for the winter tires will make it easier to make the change between summer and winter tires.

