

## A LOS ANGELES JURY FINDS NO DEFECT AGAINST NISSAN IN A SIDE CURTAIN AIRBAG DESIGN CASE

Los Angeles, California

May 8, 2023

Nicole Salinas, et al. v. Fernando Galvis Ortiz, et al., case number BC569227 in Los Angeles County Superior Court, the Honorable J. Stephen Czuleger.

After a five-week trial and a half day of deliberation, a civil jury in downtown Los Angles found no defect and no liability against Nissan North America, Inc. and Nissan Motor Co., Ltd., in a requested \$126 million products liability design case involving a 2011 Nissan Altima that was struck by a 2014 Ford F150. The co-defendant driver of the Ford F150 was found completely liable for an awarded \$21 million verdict for the Plaintiffs.

The lawsuit stems from a two-vehicle crash that occurred at approximately 2:30 a.m. on May 11, 2014. Fernando Ortiz was driving a 2014 Ford F-150 truck southbound on Vermont Avenue in Los Angeles. At the same time, Nicole Salinas was driving a 2011 Nissan Altima westbound on Manchester Avenue. Her sister, Shanel Salinas, was asleep in the passenger seat. At the intersection, Ortiz failed to stop at a red light, and his 6500 lb. pickup (with four passengers) slammed into the passenger side of the Altima, just inches from where Shanel Salinas was sleeping. When the two vehicles collided, the pickup was going 58 mph, and the Altima was going around 30 mph. The Altima's front and passenger-side airbags all deployed with the side curtains starting to deploy at two milliseconds or ten times faster than the blink of an eye. Nicole Salinas received minor orthopedic injuries. Shanel Salinas, however, received a traumatic brain injury (TBI) due to a diffuse axonal injury (DAI) along with pelvic fractures.

Plaintiffs alleged that the 2011 Altima's side curtain airbag was defective, claiming that Shanel Salinas received her DAI TBI when she hit her head on an allegedly "underinflated" part of the side-curtain airbag, which is the vent chamber, causing her head to impact the B-pillar (the support structure between the front and rear doors). Plaintiffs provided alternative designs from various car models, including those from Nissan. Plaintiffs alleged that the B-pillar was a hazard, Nissan should have considered it a primary impact zone for the 2011 Altima and tested for passengers seated at or near the B-pillar. Had there been greater protection at the B-pillar, Plaintiffs claim that Shanel Salinas would not have received her DAI TBI.

In response, Nissan provided information on the design of the side curtain airbag, including considerations made and testing done at the B-pillar and how a thicker bag may not deploy and inflate properly to the primary protection zones at the most vulnerable area, the window openings.



Nissan also presented information about the numerous tests it performed to confirm its design, and the supplier that helped the 2011 Nissan Altima earn the highest side impact rating by the National Highway Traffic Safety Administration (NHTSA) and the Insurance Institute for Highway Safety (IIIHS). Nissan established that governmental and IIHS testing requirements applicable to all car manufacturers, focus on the most vulnerable positions, the window openings, and not the B-pillar.

Nissan also ran two full-scale crash tests simulating the wreck that demonstrated how the physics involved acted upon the occupants kinematics. In both studies, the right front seat dummy moved forward and to the right, until its head interacted with the primary chamber of the inflated curtain covering the window opening. Nissan explained that is what happened with Shanel Salinas – her head moved forward and to the right into the primary chamber, not the B-pillar. The curtain prevented a skull fracture, and even prevented any swelling to the right side of her head. The curtain could not prevent the extreme rotational forces that occurred when her head was stopped by the curtain after hitting it at 40 mph. The continued movement of her brain inside her skull, which cannot be prevented, caused her DAI.

To put the crash severity in context, when the Ford F-150 struck the Altima, it slowed to 40 mph at 40 milliseconds as it crushed into the side of the Altima. Based on calculations provided by Nissan's crash reconstructionist, Shanel Salinas's head experienced 2000 pounds of force upon impact, which is equivalent to falling five stores from a building. Despite this severity, no medical records or radiological studies showed a fracture, bruising, or swelling to Shanel Salinas's head. Given the circumstances, the side curtain airbag performed remarkably well, and there is no evidence that Shanel Salinas impacted the B-pillar.

Plaintiffs called the following experts: William Broadhead (airbag design), Robert Caldwell (crash reconstruction), Johnathan Eisenstat, M.D. (forensic pathology/hypoxia), David Fractor, Ph. D (economist), Joellen Gill (human factors/warnings), Brian King, M.D. (neuroradiologist), Paul Lewis, M.S. (biomechanic), Barry Ludwig, M.D. (neurologist), Lawrence Miller, M.D. (medical and rehabilitation), Jeffrey Schaeffer, Ph.D. (neuropsychologist), Anthony Reading (psychologist), and Jan Roughan, R.N. (life care).

Nissan called the following experts: Greg Stephens (crash reconstruction), Karen Balavich (side curtain design), Daniel Camacho, M.D. (neuroradiology), and Catherine Corrigan (biomechanics). Nissan also called Jeffrey Dix, an in-house engineer who worked on the design of the curtain airbag.

Plaintiffs were represented by Arash Homampour, Nareem M. Touloumdjian, and Corey Arzoumanian of the Homampour Law Firm in Los Angles, California.

Nissan was represented by Thomas M. Klein, Greg Gilmer, Paul R. Lee of Klein Thomas Lee & Fresard.



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