

**IN THE UNITED STATES COURT OF APPEALS  
FOR THE FIFTH CIRCUIT**

United States Court of Appeals  
Fifth Circuit

**FILED**

October 31, 2012

---

No. 12-40147  
Summary Calendar

---

Lyle W. Cayce  
Clerk

CHAD MCCUNE; CARMEN MCCUNE,

Plaintiffs-Appellants

v.

GRACO CHILDREN'S PRODUCTS, INC.,

Defendant-Appellee

---

Appeal from the United States District Court  
for the Eastern District of Texas  
USDC No. 5:09-CV-107

---

Before SMITH, PRADO, and HIGGINSON, Circuit Judges.

PER CURIAM:\*

Plaintiffs-Appellants Chad and Carmen McCune challenge the district court's admission at trial of a video testing a theory of the car accident that injured their son. They also challenge the district court's decision to allow expert testimony about aspects of the crash. We AFFIRM.

---

\* Pursuant to 5TH CIR. R. 47.5, the court has determined that this opinion should not be published and is not precedent except under the limited circumstances set forth in 5TH CIR. R. 47.5.4.

No. 12-40147

## 1. Facts and Proceedings

Four-year-old J.M. sat in a car seat in his mother's SUV when she crashed the vehicle into a farm tractor on July 29, 2007.<sup>1</sup> J.M. lurched forward at impact, suffering contusions, lacerations, and spinal injuries at the neck. He became a paraplegic.

J.M.'s parents (the "McCunes") filed a lawsuit on July 29, 2009 against the car seat manufacturer, Graco Children's Products, Inc. They alleged that a defect in Graco's "TurboBooster" seat caused J.M.'s injuries.

At trial the parties agreed that the McCune family had properly installed J.M.'s seat. They also agreed that the impact caused the left armrest—which helps a child use seat belts designed for adults—to detach from the seat.

The parties disagreed on the position of the shoulder belt at impact. The McCunes argued that J.M. wore his shoulder belt across the front of his body at impact. They contended that a defect in the car seat caused the shoulder belt to tear the armrest from the seat, allowing J.M. to roll out of the belt and pitch forward.

Graco argued that J.M. wore his shoulder belt behind his back at impact. The company contended that it was this misuse of the belt that explained his injuries. They added that the detachment of the armrest was not significant because the armrest was a "comfort feature for the child" that provided "no restraint of the torso."

Engineer William Van Arsdell was one of Graco's key experts. He testified that the car seat's armrest could not detach if the belt was in front, and that J.M.'s belt was behind his back at impact. He also said that a child would not roll out of a shoulder belt worn in front even if the armrest detached.

---

<sup>1</sup> J.M.'s mother, Carmen McCune, was apparently distracted and driving faster than the speed limit.

## No. 12-40147

Van Arsdell based his testimony on physical evidence and six “sled tests” he created.<sup>2</sup> He sought to “recreate[] the forces of the accident” with the tests in order to better understand the physics of the crash.<sup>3</sup> As a result, he used the same SUV and car seat models involved in the accident, along with a crash test dummy approximating J.M.’s height and weight. He played video of each test during his testimony.<sup>4</sup>

Van Arsdell testified that the armrest did not detach in the three tests in which he placed the belt across the front of the dummy and properly installed the armrest. The armrest also did not detach when he weakened the armrest but put the belt in front, and when he properly installed the armrest but put the belt in the back.

Van Arsdell still wanted to create a test in which the armrest detached and the dummy rolled out of the shoulder belt. Van Arsdell explained that he “wanted to understand what effect the armrest coming out would have on the marks and on rollout, because as you’ve heard time and time again here, plaintiffs have suggested that the armrest coming out caused [. . . J.M.] to roll out of the belt.”

---

<sup>2</sup> The physical evidence Van Arsdell examined included the actual vehicle and seat involved in the crash, testing and design documents for the car seat, official reports concerning the crash, and photographs of the accident scene.

<sup>3</sup> The government had not tested an SUV crashing into a farm tractor.

<sup>4</sup> Graco did not just rely on Van Arsdell’s tests to suggest misuse of the shoulder belt. Instead, it showed that J.M.’s mom had indicated on a social networking website that J.M. took his shoulder belt off before the crash. Graco also had experts Van Arsdell and Catherine Corrigan, a biomechanical engineer, testify that: (1) there were no marks on J.M.’s body suggesting that he pressed up against a shoulder belt; (2) the pattern of injuries indicated that he jackknifed over the lap belt; and (3) the marks on the belt were consistent with behind-the-back placement.

## No. 12-40147

Van Arsdell testified that, as a result, he placed the shoulder belt behind the dummy's back in Test 6, loosened the lap belt, removed screws from the armrest, and snapped the armrest out of place.

The Test 6 video was played during Van Arsdell's testimony. The video shows the armrest detaching from the car seat and the dummy's upper torso lurching forward before recoiling and slamming into the dummy's legs. The video lasts about 20 seconds, and resembles in style the first five test videos.

The McCunes had sought to bar the Test 6 video, and testimony about the video, in a pre-trial motion.<sup>5</sup> At trial, they renewed their objection.

The district court overruled the McCunes' objection to the video. The district court then repeated its pre-trial offer to give the jury a limiting instruction regarding the video. The McCunes rejected the offer, believing that the limiting instructions would not cure the purported prejudice.<sup>6</sup> They also wanted to preserve their right to appeal the use of the video.

The McCunes proceeded to question Van Arsdell about Test 6 on cross-examination, but only to highlight that the dummy's injuries in the video differed from those suffered by J.M. The McCunes also chose to play Test 6 in both their closing argument and rebuttal to illustrate aspects of the accident.<sup>7</sup>

The jury rendered a verdict against the McCunes on August 24, 2011, finding that the car seat was not the "producing cause" of J.M.'s injuries.

On appeal the McCune's raise two evidentiary issues: (1) whether the district court erred in allowing Graco's experts to testify that the placement of

---

<sup>5</sup> The McCunes also had unsuccessfully challenged Van Arsdell's credentials.

<sup>6</sup> The district court still warned in its jury instructions that "slides and visual aids are not evidence; they are used for the limited purpose of assisting with case presentation and in an effort to help you follow the evidence presented over the course of the trial."

<sup>7</sup> Graco referenced Test 6 in its closing argument when discussing marks left on the belt, but did not play the video.

No. 12-40147

the shoulder belt caused J.M.'s injuries when there was no reliable, scientific basis to show that a behind-the-back belt could ever tear out a properly installed TurboBooster armrest and when there was no factual foundation that the belt was behind J.M.'s back; and (2) whether the district court erred in allowing the jury to see and consider the results of a test performed by Graco that recreated an accident consistent with Graco's behind-the-back causation theory.

## 2. Standard of Review

This court reviews a district court's evidentiary rulings for abuse of discretion. *E.E.O.C. v. Manville Sales Corp.*, 27 F.3d 1089, 1092-93 (5th Cir. 1994), *cert. denied*, 513 U.S. 1190 (1995). A district court abuses its discretion when a ruling is "based on an erroneous view of the law or a clearly erroneous assessment of the evidence." *Bocanegra v. Vicmar Servs., Inc.*, 320 F.3d 581, 584 (5th Cir. 2003), *cert. denied*, *Sandoz v. Bocanegra*, 540 U.S. 825 (2003). Even if there is an abuse of discretion, the district court's error is harmless and not reversible "unless the ruling affected substantial rights of the complaining party." *Id.*

## 3. The Experts' Testimony

The district court must ensure under Fed. R. Evid. 702 that expert opinion testimony "rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993). The testimony is relevant if it helps "the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a); *see also Daubert*, 509 U.S. at 591-92. The testimony is reliable if the expert bases the testimony on "sufficient facts or data," uses "reliable principles and methods," and "reliably applie[s] the principles and methods to the facts of the case." Fed. R. Evid. 702(b)-(d); *see also Daubert*, 509 U.S. at 593-94.

## No. 12-40147

Here, the McCunes argue that the district court abused its discretion in allowing Graco's experts to testify that the shoulder belt was behind J.M.'s back and that a belt in such a position could tear out the car seat's armrest.<sup>8</sup>

The district court did not abuse its discretion in allowing Graco's experts' testimony concerning the seat belt and armrest because the testimony was relevant and rested on a reliable foundation. The experts' testimony was relevant because testimony about the position of the belt, and the armrest detachment, helped the jury to understand the key issue at trial: whether the car seat was a producing cause of J.M.'s injuries. The position of the belt was relevant because Graco argued that it was the placement of the belt, and not a defect in its seat, that caused J.M.'s injuries. The armrest detachment was relevant because the McCunes argued that the detachment was a defect that allowed J.M. to roll out of the shoulder belt.

The experts' testimony rested on a reliable foundation because they based their conclusions on both tests exploring crash conditions and their analysis of the physical evidence from the accident.

Van Arsdell explained in detail the methodology of the tests before showing the videos.<sup>9</sup> He testified, for example, that the tests used the same vehicle and car seat models involved in the accident, along with a dummy that approximated J.M.'s height and weight.<sup>10</sup>

---

<sup>8</sup> The McCunes do not elaborate on this argument in their briefs. They also do not explain whose testimony they are challenging, although it appears that they focus on statements made by experts William Van Arsdell and Catherine Corrigan.

<sup>9</sup> Graco contends that the McCunes waived their right to challenge the admissibility of Van Arsdell's opinion about the placement of the shoulder belt because the McCunes did not raise the issue in their pre-trial *Daubert* motion. However, the McCunes appeared to challenge the behind-the-back shoulder belt theory in a pre-trial motion in limine. As a result, it appears that they preserved their claim of error. Fed. R. Evid. 103(a).

<sup>10</sup> The McCunes apparently found the test videos reliable enough to play during their closing argument and rebuttal to illustrate various aspects of the crash.

No. 12-40147

Van Arsdell did not, however, just base his conclusions on the videos. Van Arsdell testified that he examined the vehicle and the seat, read design documents and official reports, viewed photographs of the accident scene, and conducted a “surrogate study” to help ascertain J.M.’s position at impact. Likewise, Van Arsdell and expert Catherine Corrigan testified that there were other indications based on the physical evidence from the crash that the belt was behind J.M.’s back: there were no marks on J.M.’s body suggesting that he pressed up against a shoulder belt; the pattern of injuries indicated that he jackknifed over the lap belt; and the marks on the belt were consistent with behind-the-back placement.

The McCunes are correct that none of Van Arsdell’s tests showed a behind-the-back belt tearing the armrest from the seat. The tests do suggest, however, that the behind-the-back placement could stress the armrest, and that a properly worn shoulder belt could not detach the armrest.<sup>11</sup> Moreover, Graco presented testimony that the detachment was not significant because the armrest is a “comfort feature for the child” that provides “no restraint of the torso.” As a result, the tests’ failure to show a behind-the-back belt tearing out a properly installed armrest is not, as the McCunes suggest, a smoking gun.

In sum, the district court did not abuse its discretion in admitting Graco’s experts’ testimony about the belt position and armrest detachment because the testimony was relevant and rested on a reliable foundation.

#### 4. Test Video 6

A district court has “wide discretion to admit evidence of experiments conducted under substantially similar conditions” as the underlying accident.

---

<sup>11</sup> The armrest did not detach in any of Van Arsdell’s tests in which he placed the shoulder belt in the proper position. The Test 3 video—simulating the more moderate collision forces suggested by the McCunes—shows the behind-the-back shoulder belt pulling up on the armrest, but not causing detachment.

No. 12-40147

*United States v. Norris*, 217 F.3d 262, 270 (5th Cir. 2000) (quoting *Barnes v. Gen. Motors Corp.*, 547 F.2d 275, 277 (5th Cir. 1977)). If a party offers the demonstrative evidence only as an illustration of general scientific principles, however, and not as a re-enactment of disputed events, it need not pass this “substantial similarity” test. *Muth v. Ford Motor Co.*, 461 F.3d 557, 566 (5th Cir. 2006). The district court may still, of course, exclude demonstrative evidence if the danger of unfair prejudice or confusion posed by the evidence substantially outweighs its probative value. Fed. R. Evid. 403.

Here, the McCunes argue that the district court abused its discretion in admitting Test 6 because the video was a re-enactment that was not substantially similar to the underlying accident. The McCunes contend—and Graco does not dispute—that the test differed from the accident because expert Van Arsdell weakened the armrest. They add that Van Arsdell confused the jury into thinking that the test was a re-enactment of the accident by using the same vehicle and car seat models involved in the crash, and by testifying that the tests sought to “recreate” the accident.

The McCunes also argue that *Barnes* controls the facts in this case. In *Barnes*, the plaintiff claimed that defective engine mounts caused his injuries in a car accident. *Barnes*, 547 F.2d at 276. The plaintiff’s expert created a test “purport[ing] to simulate the circumstances” of the accident showing that the engine mounts were defective, yet used a test vehicle that did not even include the mounts. *Id.* at 277-78. This court held that the admission of visual evidence of the experiment was in error because, without the mounts, the experiment “had no probative value” and instead “merely demonstrated well known physical happenings resulting from universally accepted principles disputed by no one.” *Id.* at 277.

The district court did not abuse its discretion in allowing Graco to play and discuss the Test 6 video because the video did not re-enact the accident.

No. 12-40147

First, Van Arsdell testified that he weakened the armrest to see what marks its detachment would leave on the seatbelt—not to re-enact the accident. The McCunes highlight Van Arsdell’s use of the word “recreate” in reference to the test videos as evidence that Test 6 was a re-enactment. Examining Van Arsdell’s remarks in context, however, reveals that Van Arsdell testified that he sought to recreate *the forces of the accident*, not the crash itself.

Second, the fact that Graco played video of all six tests—each exploring a different accident scenario—made clear that the tests were not simulations, but instead illustrations of crash theories.

Third, Graco minimized any prejudice resulting from the video by limiting its use. For example, Graco made a brief reference to, but did not play, the video in its closing argument. It was the McCunes who played the video during their closing argument and rebuttal.

Fourth, the district court gave instructions cautioning the jury not to consider visual aids as evidence. The district court did not offer warnings specific to Test 6, but only because the McCunes rejected such instructions.

Fifth, unlike in *Barnes*, the expert introducing the test video in this case did not “purport to simulate” the circumstances of the crash. Instead, he made clear that the video tested the limited proposition that a detached armrest would leave a mark on the shoulder belt. Moreover, unlike in *Barnes*, the test here had probative value because it showed that a detached armrest could produce marks similar to those left on the belt in the accident.

In sum, the district court did not abuse its discretion in allowing Graco to play and discuss the Test 6 video because Graco made clear that the video was not a re-enactment of the accident. We therefore do not address whether Test 6 was substantially similar to the crash.

## 5. Conclusion

Accordingly, we AFFIRM the judgment of dismissal based on the verdict.