

**United States Court of Appeals**  
**For the Eighth Circuit**

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Nos. 18-1826, 18-1874, 18-1932

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Furlandare Singleton, individually and as administrator of the estates of Dequan Singleton, Syndi Singleton, and Haylee Singleton, decedents; Clyde Hatchett, individually and as administrator of the estate of Emily Beaver, decedent; and Marilyn Louise Beavers, individually as an administrator of the estate of Marilyn Beavers, decedent

*Plaintiffs-Appellants*

v.

Arkansas Housing Authorities Property & Casualty Self-Insured Fund, Inc. (specifically, the Jacksonville Housing Authority, also known as Max Howell Place Housing Projects); Evanston Insurance Company, an Illinois corporation; Phil Nix, individually and in his official capacity as executive director of Jacksonville Housing Authority; BRK Brands, Inc.; City of Jacksonville; Jacksonville Fire Department; Engineer Wayne Taylor, individually and in his official capacity; Captain Larry Hamsher, individually and in his official capacity; Engineer Chris McDonald, individually and in his official capacity; Firefighter Tony Sutherland, individually and in his official capacity; Captain Dewan Lewis, individually and in his official capacity; and John and Jane Does, 1-50

*Defendants - Appellees*

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Appeals from United States District Court  
for the Eastern District of Arkansas - Western Division

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Submitted: January 16, 2019

Filed: August 19, 2019

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Before LOKEN, GRASZ, and STRAS, Circuit Judges.

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GRASZ, Circuit Judge.

Marilyn Beavers (“Beavers”) and her four children tragically died from smoke inhalation as a result of a kitchen fire in their apartment in Jacksonville, Arkansas. The administrators of their estates sued all of the following: (1) the Jacksonville Housing Authority (“JHA”), along with its director and its insurer, alleging they failed to equip the apartment with a working smoke alarm; (2) the manufacturer of the smoke alarm, alleging the smoke alarm in the apartment was defective and failed to sound during the fire; and (3) the City of Jacksonville, its fire department, and several firefighters, alleging the firefighters conducted a deficient investigation when they responded to a report by Beavers’s neighbor of smelling smoke. The district court<sup>1</sup> granted summary judgment to each of the defendants, concluding there was insufficient evidence of causation. The plaintiffs each appealed. The administrator of Beavers’s estate also appealed the denial of her motion to exclude the defendants’ expert witness and the district court’s imposition of certain discovery costs on her counsel. We affirm the district court.

### **I. Background**

In the early morning of March 22, 2012, Beavers and her children, Dequan, Syndi, Haylee, and Emily, spoke on the phone with Beavers’s fiancée, Furlandare Singleton, before going to bed. Phone records show the call began at 2:19 a.m. and lasted for about four and a half minutes. Shortly thereafter, a fire erupted in the kitchen. The fire marshal later determined unattended cooking caused the fire. A pot

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<sup>1</sup>The Honorable Kristine G. Baker, United States District Judge for the Eastern District of Arkansas.

was found on a kitchen stove burner and the burner knob was turned to the on position.

At 5:46 a.m., Beavers's neighbor, Jennifer Gray, whose apartment shared a wall with Beavers's apartment in their duplex building, called 911, reporting that she "smell[ed] a strong smell of smoke." Firefighters arrived at 6:02 a.m. After investigating in Gray's apartment and knocking on Beavers's apartment door — finding no signs of smoke or fire — they left at 6:23 a.m.

At around 7:25 a.m., two maintenance workers who had been contacted by Gray walked around the duplex and noticed fire damage near the kitchen window of Beavers's apartment. They let themselves inside and found the bodies of Beavers and her children. Two children were found in one bedroom, a third child was found in another bedroom, and Beavers and the fourth child were found together in the bathroom. The cause of death for each decedent was soot and smoke inhalation. The coroner was unable to determine the approximate time of the deaths.

Beavers's body was found with severe burns on her hands, arms, forehead, and neck from attempting to extinguish the fire. While Beavers's efforts to extinguish the fire were not successful, the fire marshal determined she likely interrupted the burning process and the fire burnt itself out after spreading from the kitchen range to the cabinetry.

A smoke alarm that had been mounted in the hallway of the apartment was found lying on the floor. When the smoke alarm was moved from the floor, the absence of soot on the carpet underneath it indicated that it was "on the floor early in the fire," according to a Jacksonville Police Department detective. The alarm had been mounted on the ceiling and was "hard wired," meaning it was directly wired to the apartment's electricity and was not battery powered. The detective noted in his report that he believed the heat from the smoke caused the smoke alarm to lose its

form and fall from its mount, disconnecting from the wires in the ceiling. But a report by the Arkansas State Crime Laboratory said a visual examination showed the wires appeared to have been cut. The hallway light switch had soot smears on it and there was a scratch in the “popcorn” ceiling near where the smoke alarm had been mounted.

In Arkansas state court, Marilyn Louise Beavers (“Marilyn Louise”) (the mother of the decedent, Beavers, and the administrator of Beavers’s estate), sued the JHA, the director of the JHA, and the JHA’s insurance company (Evanston Insurance Co.) (collectively, “the Housing Authority Defendants”);<sup>2</sup> the City of Jacksonville, the Jacksonville Fire Department, and several individual firefighters (collectively, “the City Defendants”); and the manufacturer of the smoke alarm (BRK Brands, Inc.). Separately, Singleton (the administrator of the estates of Beavers’s children Dequan, Syndi, and Haylee Singleton) and Clyde Hatchett (the administrator of the estate of Beavers’s other child, Emily Beavers) sued the same defendants. Marilyn Louise, Singleton, and Hatchett each filed suit both individually and in their capacities as administrators of the decedents’ estates. These cases were consolidated and later removed to federal court.

Prior to any summary judgment motions, BRK filed a motion for the court to approve of non-destructive and, if necessary, destructive testing of the smoke alarm found in Beavers’s apartment. BRK included a proposed protocol for the examination. The motion noted all the defendants agreed to the testing and all the plaintiffs opposed the testing. Marilyn Louise formally objected to the motion. Before the district court ruled on the motion, the parties agreed to a non-destructive

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<sup>2</sup>Prior to ruling on the other defendants’ summary judgment motions, the district court granted summary judgment to defendants JHA and Phil Nix (the JHA director) after they argued the claims against them were barred by Ark. Code. Ann. §§ 21-9-301 and 23-79-210 because the housing authority’s liability insurer, Evanston Insurance Co., was being sued directly. The plaintiffs did not oppose the motions for summary judgment by JHA and Nix.

examination of the alarm. All parties were present at this examination that occurred in December 2015. According to the defendants, the examination definitively showed the smoke alarm sounded during the fire.

Marilyn Louise then moved for additional testing of the smoke alarm, including destructive testing. BRK, joined by the Housing Authority Defendants, objected to the additional testing, noting this was the exact testing it originally proposed but Marilyn Louise opposed, and the testing could have been done in the first examination. BRK also noted the examination was unnecessary since the first one conclusively showed the smoke alarm had properly functioned during the fire. Additional testing would impose additional costs on the defendants because they would have to pay for their experts to travel to and attend the examination. The district court allowed the testing, but under the condition that counsel for Marilyn Louise would be “required to pay all of defendants’ reasonable costs for expert witnesses related to the additional testing.” The court further said that “[i]f a dispute over costs arises, the parties may move for a hearing on the issue.” But on a motion to reconsider, the district court limited the cost to be borne by counsel for Marilyn Louise to \$1,000.

The Housing Authority Defendants, the City Defendants, and BRK each moved for summary judgment. Prior to the district court ruling on the summary judgment motions, Marilyn Louise moved to strike the affidavit of the defendants’ expert Dr. Daniel T. Gottuk, who opined that the application of the enhanced soot deposition (“ESD”) methodology showed the smoke alarm did sound during the fire. The district court denied the motion, concluding Dr. Gottuk’s expert testimony was “sufficiently reliable and trustworthy” to be admitted.

The district court granted the defendants’ summary judgment motions, finding among other things there was insufficient evidence to show the decedents’ deaths were caused by the defendants’ actions. As to the Housing Authority Defendants and

BRK, the district court concluded there was no record evidence “as to when Ms. Beavers became aware of the fire in relation to when decedents became unconscious,” “of how much time she spent trying to put out the fire,” “as to when the alarm sounded in relation to when decedents became unconscious,” or “that decedents lacked sufficient time to escape the fire as a proximate result of any claimed issue with the smoke detector.” Marilyn Louise, Singleton, and Hatchett separately appealed.

## **II. Analysis**

### **A. Summary Judgment**

Because there was insufficient evidence of causation, we conclude the district court did not err in granting summary judgment to the defendants.

“We review an order granting summary judgment de novo.” *Zayed v. Associated Bank, N.A.*, 913 F.3d 709, 714 (8th Cir. 2019) (quoting *Oppedahl v. Mobile Drill Int’l, Inc.*, 899 F.3d 505, 509 (8th Cir. 2018)). “Summary judgment is appropriate where a party shows ‘there is no genuine dispute as to any material fact’ and the party ‘is entitled to judgment as a matter of law.’” *Id.* (quoting Fed. R. Civ. P. 56(a)). “A dispute of fact is ‘genuine’ if a factfinder could reasonably determine the issue in the non-moving party’s favor.” *Id.* (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). A factfinder can reasonably reach a conclusion if that conclusion is “based on ‘sufficient probative evidence’ and not on ‘mere speculation, conjecture, or fantasy.’” *Id.* (quoting *Williams v. Mannis*, 889 F.3d 926, 931 (8th Cir. 2018)).

#### **1. Housing Authority Defendants and BRK**

The plaintiffs sought to hold the Housing Authority Defendants liable for negligence and premises liability and BRK for various product liability claims and

negligence. Under Arkansas law, “[p]roximate causation is an essential element for a cause of action in negligence.” *Neal v. Sparks Reg’l Med. Ctr.*, 422 S.W.3d 116, 120 (Ark. 2012). Premises liability is a species of negligence and also requires a plaintiff to show his damages were proximately caused by the defendant’s conduct. *See Lloyd v. Pier W. Prop. Owners Ass’n*, 470 S.W.3d 293, 297 (Ark. Ct. App. 2015). Likewise, product liability claims require proximate causation. *See Pilcher v. Suttle Equip. Co.*, 223 S.W.3d 789, 794 (Ark. 2006). Evidence is insufficient to prove proximate causation if it merely presents the factfinder with “a choice of possibilities” — “[c]onjecture and speculation, however plausible, cannot be permitted to supply the place of proof.” *Mangrum v. Pigue*, 198 S.W.3d 496, 503 (Ark. 2004).

The plaintiffs argue the Housing Authority Defendants had a duty to equip Beavers’s apartment with a working smoke alarm and BRK had a duty to supply a non-defective product. We assume these duties for purposes of our analysis and conclude no reasonable factfinder could determine, absent speculation, that the fire alarm failed to sound, causing the tragic deaths of Beavers and her children.

As an initial matter, maintenance work orders from two and three months before the fire show the smoke alarm was in working order. More importantly, the defendants provided evidence the smoke alarm did sound during the fire. Dr. Gottuk’s affidavit provided his expert opinion “that the smoke alarm’s horn sounded.” His conclusion was based on ESD evidence found in the examination of the alarm. This methodology examines soot patterns on a smoke alarm to determine whether it sounded during a fire. The reliability of this methodology is discussed in greater detail below.

The plaintiffs’ evidence to the contrary is unavailing. Their expert, Dr. B. Don Russell, who was not present at the examination of the smoke alarm, never actually claimed in his affidavit that the alarm failed to sound. Rather, he claimed the alarm

may not have sounded early enough in the fire, a theory not pled in the plaintiffs' operative complaint, as discussed below. The closest he came to claiming the alarm failed to sound was stating that smoke alarms utilizing ionization technology, like the alarm here, can fail to sound "under slow developing and/or smoldering fire conditions." But Dr. Russell did not claim the fire in Beavers's apartment was a "slow developing and/or smoldering fire," nor is there record evidence to support such a conclusion. And the evidence here that the kitchen fire was ignited by unattended cooking supports the opposite conclusion.

Much of Dr. Russell's affidavit focused on discrediting the ESD methodology relied upon by Dr. Gottuk. But as the district court correctly observed, merely attacking the reliability of the defendants' evidence "do[es] nothing to satisfy [the] plaintiffs' burden of proving that the smoke alarm failed to sound." *See Liberty Lobby*, 477 U.S. at 256–57 ("The movant has the burden of showing that there is no genuine issue of fact, but the plaintiff is not thereby relieved of his own burden of producing in turn evidence that would support a jury verdict. . . . [T]he plaintiff must present affirmative evidence in order to defeat a properly supported motion for summary judgment.").

The plaintiffs' other expert, Roger B. Tate, did not claim in his affidavit that the alarm failed to sound. Rather, he claimed it is "unlikely" the smoke alarm was "functioning effectively." Even construing this as a claim the alarm did not sound, it is unsupported. His claim that the alarm was not effective is simply based on the fact three of the children were found in their bedrooms and presumably were not awake for long, if at all, before they died of smoke inhalation.

But there are multiple possible reasons why the alarm may not have awoken the children. The wires to the alarm appeared to have been cut and the soot pattern on the floor showed the alarm fell to the ground at an early point during the fire. And there was a scratch mark in the ceiling near where the smoke alarm had been



mounted. Beavers may have cut or disconnected the alarm to avoid waking her children as she was attempting to extinguish the fire on her own. Or the heat from the fire may have severed the wires before the alarm sounded long enough to wake the children. Or the alarm may not have sounded. But to be sufficient, evidence must do more than merely allow the factfinder to guess between possible explanations. *See Mangrum*, 198 S.W.3d at 503. Factfinders cannot fill the gaps in the evidence with speculation. *See id.* Simply pointing to the fact three of the children died in their bedrooms is insufficient evidence for a factfinder to reasonably conclude the alarm failed to sound.

Additionally, the affidavit from Beavers's neighbor Gray does not create a genuine dispute of fact as to whether the alarm sounded. In her affidavit, Gray stated that after waking up (at around 5:46 a.m.<sup>3</sup>) and smelling smoke, she did not hear an alarm going off and she "th[ought she] would have heard it" if it were going off. But the plaintiffs themselves acknowledged the kitchen fire ignited "[m]oments after" Beavers's phone call with Singleton ended, which was just shy of 2:30 a.m. In light of the fact the smoke alarm became disconnected from the ceiling "early in the fire," and thus disconnected from its hard-wired power source, it is unsurprising its alarm was not still going off at 5:46 a.m. Gray's affidavit says nothing about whether the smoke alarm went off at any point between when the fire started and when she woke up.

We also agree with the district court that "[a]ny theory that the smoke detector failed to timely sound or [to] sound[] early enough, long enough, or loudly enough to be effective is not pleaded in the operative amended complaint." The plaintiffs' alternative theory that the smoke alarm actually may have sounded, but failed to

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<sup>3</sup>While Gray's affidavit says she woke up at 5:50 a.m., walked around to try to find the source of the smoke smell, and then called 911, the 911 call transcript indicates the 911 call occurred at 5:46 a.m.

sound early enough, was injected into the case late in the litigation when the evidence overwhelmingly undermined their original theory that the smoke alarm never sounded at all. The plaintiffs did not seek to amend their complaint to plead this new theory. “[Although] the pleading requirements under the Federal Rules [of Civil Procedure] are relatively permissive, they do not entitle parties to manufacture claims, which were not pled, late into the litigation for the purpose of avoiding summary judgment.” *Northern States Power Co. v. Fed. Transit Admin.*, 358 F.3d 1050, 1057 (8th Cir. 2004); *see also* Fed. R. Civ. P. 8(a).

Even if the plaintiffs had pled their new theory that the smoke alarm did not sound early enough, it is not supported by the evidence. Again, the logic of Dr. Russell and Mr. Tate on this point is simply that because everyone died, the smoke alarm must not have functioned properly. As discussed above, this evidence is not sufficient because it would simply leave the factfinder with “a choice of possibilities.” *Mangrum*, 198 S.W.3d at 503. The plaintiffs’ experts failed to provide any explanation as to why the smoke alarm not sounding soon enough was more likely than any other cause. And as discussed above, Dr. Russell’s theory that the smoke alarm did not sound soon enough because it utilized ionization technology is premised on the fire occurring under “slow developing and/or smoldering fire conditions,” a premise unsupported and even contradicted by the record.

We conclude the district court did not err in granting summary judgment to the Housing Authority Defendants and BRK.

## 2. City Defendants

The plaintiffs brought claims against the City Defendants under 42 U.S.C. § 1983 and Arkansas tort law. Without addressing the flaws in the plaintiffs’ legal theories, we affirm the district court’s grant of summary judgment to the City Defendants based on the lack of evidence showing causation.

The plaintiffs claim the firefighters did not take Gray's report of smelling smoke seriously and did not do a good enough job inspecting the duplex when checking for signs of smoke and fire. For this conduct to have been the cause of Beavers's death, Beavers and the children would logically have had to still be alive at 6:02 a.m. when the firefighters arrived, but died before their bodies were found at around 7:25 a.m. There is no record evidence that would show they were still alive at 6:02 a.m. The plaintiffs' operative complaint states the fire ignited "[m]oments after the family's 2:00 a.m. phone conversation" with Singleton. Phone records show the phone call was actually initiated at 2:19 a.m. and lasted for about four and a half minutes. It is incredibly unlikely anyone inside the apartment was still alive at 6:02 a.m. when the kitchen fire ignited "moments after" the 2:19 a.m. phone call. At most, there is insufficient evidence as to causation; the evidence would leave the factfinder with "a choice of possibilities." *Mangrum*, 198 S.W.3d at 503.

We conclude the district court did not err in granting summary judgment to the City Defendants.

### **B. *Daubert* Motion**

Marilyn Louise argues the district court abused its discretion by denying her motion to strike the affidavit of defense expert Dr. Gottuk. We disagree and affirm.

A district court's decision to admit or exclude expert testimony under Federal Rule of Evidence 702 is reviewed for abuse of discretion under the "flexible" standard set forth in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592–95 (1993). See *Adams v. Toyota Motor Corp.*, 867 F.3d 903, 914 (8th Cir. 2017). Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. Evaluating the reliability of an expert's opinion "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning properly can be applied to the facts in issue." *Adams*, 867 F.3d at 915 (quoting *Daubert*, 509 U.S. at 592–93). Factors courts may consider in conducting this analysis include: "whether a theory or technique can be and has been tested"; "whether it has been subjected to peer review and publication"; "whether, in respect to a particular technique, there is a high known or potential rate of error and whether there are standards controlling the technique's operation"; and "whether the theory or technique enjoys general acceptance within a relevant scientific community." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149–50 (1999) (cleaned up) (quoting *Daubert*, 509 U.S. at 592–94).

Marilyn Louise argues the ESD methodology used by Dr. Gottuk is unreliable. Dr. Russell, whose affidavit was offered in support of the *Daubert* motion, claims "[t]here has been little or no testing of the [ESD] method by independent researchers" and "[t]he number of scientific experiments and tests that have been conducted on this method is extremely limited." To the contrary, the evidence overwhelmingly shows the ESD methodology is reliable and is accepted by the relevant scientific community.

Dr. Russell's claims were countered by an affidavit from Dr. Lori Streit offered by BRK. Dr. Streit explained it has long been "well established that an acoustic field can greatly enhance the rate of particle agglomeration." "[T]he conditions optimum for acoustic agglomeration are substantially similar to those exhibited by a sounding smoke alarm." Simplified, ESD analysis can show a smoke alarm sounded during a fire because the acoustic field from the alarm causes the soot on the alarm to agglomerate into detectable patterns.

Dr. Streit's affidavit explained how the ESD methodology has proven to be accurate and has been accepted by the fire investigation community. In 2001, a research paper by Dr. Streit and her co-authors on "applying the science of acoustic agglomeration to smoke alarms, alarms which were mounted for testing in an actual full-scale house fire, was presented and published in the Proceedings of the Fire Suppression and Detection Research Application Symposium at The Fire Protection Research Foundation Annual Meeting." The research paper won an award for the best paper at the meeting and subsequently underwent a peer review process and was published in *Fire Technology*, "the foremost refereed journal in the Fire Science field." Further research was done on the ESD methodology in which Dr. Streit "personally examined over 400 smoke alarms . . . as part of a double-blind study . . . [with a] one hundred percent correct determination of activation." Several other researchers subsequently confirmed the validity of the ESD methodology in fire investigations. In 2011, the National Fire Protection Agency ("NFPA") incorporated the ESD methodology into the national industry standard for fire investigations. Dr. Russell unsuccessfully attempted to dissuade the NFPA from adopting the ESD methodology into the national standards.

District courts exercise an important "gatekeeping function" to keep out unreliable and invalid expert testimony. *Glastetter v. Novartis Pharm. Corp.*, 252 F.3d 986, 988 (8th Cir. 2001). Dr. Russell's general statements about the lack of research and unreliability of the ESD methodology are inconsistent with the specific

facts articulated by Dr. Streit outlining the extensive research and acceptance of the ESD method. And the plaintiffs do not appear to actually dispute the specific factual claims made by Dr. Streit, just the conclusions to be drawn from those facts. The evidence showing the reliability and acceptance in the fire investigation community of the ESD methodology underlying Dr. Gottuk's opinions is more than enough to pass by the gatekeeper into admission. The district court did not abuse its discretion in denying Marilyn Louise's motion to strike.

### **C. Discovery Costs**

Marilyn Louise argues the district court abused its discretion by imposing on her counsel<sup>4</sup> \$1,000 of the defendants' costs related to the second examination of the smoke alarm. Under Federal Rule of Civil Procedure 26(c), a district court "may, for good cause, issue an order to protect a party or person from . . . undue burden or expense, including . . . specifying . . . the allocation of expenses, for the . . . discovery." We conclude the district court did not abuse its discretion here by finding good cause. Marilyn Louise's counsel opposed any destructive examination of the smoke alarm, only to request a destructive examination when the first examination produced favorable results for the defendants. Because that could have been done in the first examination, the district court was well within its discretion to require Marilyn Louise's counsel to pay for part of the defendants' costs associated with the second examination.

### **III. Conclusion**

For the reasons set forth herein, we affirm.

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<sup>4</sup>Marilyn Louise has not argued the district court abused its discretion by imposing costs on her counsel rather than on her personally. Thus, we do not consider whether any additional or different justification is needed to allocate discovery expenses to counsel rather than a party.