

**IN THE COURT OF APPEALS OF IOWA**

No. 16-1489  
Filed December 19, 2018

**STATE OF IOWA,**  
Plaintiff-Appellee,

**vs.**

**JOE ANTHONY LOPEZ,**  
Defendant-Appellant.

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Appeal from the Iowa District Court for Polk County, Jeanie K. Vaudt, Judge.

Joe Lopez appeals his conviction for murder in the first degree.

**AFFIRMED.**

Mark C. Smith, State Appellate Defender, and Martha J. Lucey, Assistant Appellate Defender, for appellant.

Thomas J. Miller, Attorney General, and Linda J. Hines, Assistant Attorney General, for appellee.

Heard by Tabor, P.J., and Mullins and Bower, JJ.

**TABOR, Presiding Judge.**

Joe Lopez appeals his conviction for first-degree murder following the death of his girlfriend's twenty-month-old child, R.A. Lopez claims six trial errors—two of which focus on the phrase “to a reasonable degree of medical certainty” as used by medical experts. First, Lopez alleges the expert testimony was insufficient to prove he inflicted R.A.'s fatal injuries. Second, he contends trial counsel was ineffective for not requesting a jury instruction defining reasonable degree of medical certainty. Third, he alleges counsel was ineffective for not objecting to prior-bad-acts evidence. Fourth, he argues the district court should have allowed the jury to hear he was willing to take a polygraph. Fifth, Lopez insists the district court should have excluded the medical examiner's manner-of-death testimony. And sixth, Lopez asserts the prosecutor improperly invoked the “product rule” in closing argument.

On the sufficiency claim, when viewed in the light most favorable to the verdict, the evidence presented by the State's experts—combined with other circumstances—allowed the jury to find Lopez guilty beyond a reasonable doubt. On the first ineffective-assistance claim, we find counsel had no duty to ask for a novel instruction defining a reasonable degree of medical certainty. We preserve the second claim, concerning prior bad acts, for further development in an action for postconviction relief. We find no abuse of discretion in the district court's exclusion of Lopez's willingness to take a polygraph test or admission of the medical examiner's opinion on R.A.'s manner of death. Finally, Lopez failed to demonstrate he was prejudiced by the prosecutor's statements in closing

argument. Finding no reversible error, we affirm the first-degree murder conviction.

### **I. Facts and Prior Proceedings**

In the fall of 2014, Lopez moved into the basement apartment of a house in Clive with his girlfriend, Nisa. She lived there with her three children—ages eight, four, and not quite two. R.A. was her youngest.

R.A. had flu symptoms the week of Thanksgiving 2014. When the family ate a turkey dinner on Thursday, November 27, the toddler “nibbled a little bit and then she ended up throwing up.” Nisa recalled R.A. was “very quiet” on Friday and fell asleep on the couch.

According to Lopez, around 2:00 in the morning on Saturday, November 29, he was asleep in Nisa’s bedroom when he heard R.A. crying. Lopez later told detectives he picked up R.A. from the mattress where she was sleeping with her brothers and took her to the kitchen. He said he gave her water and a piece of leftover turkey. Lopez recounted leaving R.A. in her highchair while he went to the bathroom, the door slightly ajar.

Lopez said, while in the bathroom, he “heard a smack on the floor.” According to his interview, he returned to the kitchen, where he saw R.A. lying on the floor next to her highchair. Lopez said he saw a bump on R.A.’s head. Her eyes were rolled back, and she was gasping for air. Lopez woke Nisa, telling her they needed to rush R.A. to the hospital.

Nisa recalled when Lopez woke her, R.A. already had her coat and boots on and was not making any sounds, and Lopez looked worried. Nisa felt a bump

on the back of R.A.'s head. Lopez drove Nisa and R.A. to the hospital. While on the way to the hospital, Lopez told Nisa:

R.A. woke up crying and that he went in the room and picked her up and took her to the kitchen and sat her down on her highchair and gave her a couple pieces of turkey, and he went to the restroom, and . . . right when he sat down he heard a bump.

Upon arriving at the hospital, Lopez took R.A. inside while Nisa parked the car. Lopez informed emergency room staff R.A. fell out of her highchair. R.A. was non-responsive and struggling to breathe on her own. Emergency-room staff intubated her and began assembling a team of physicians to treat her.

As the on-call trauma surgeon, Dr. Richard Sidwell evaluated R.A. when she arrived at the hospital. Dr. Sidwell described the back of her head as “boggy, and that means swollen, squishy.” He further observed

a skull fracture toward the back of her head, a skull fracture, and then within her skull, injury to the brain itself, so that's hemorrhage around the brain and creating pressure on the brain. So we knew about her severe head injury.

Also after evaluation, the initial evaluation, we knew that she had at least four rib fractures. She had fractures of ribs one and two on both sides. Those are the injuries, in addition to a bruise on her head and a scrape on her chin. Those are the injuries that we knew about after her evaluation in the emergency room.

After examining R.A., Dr. Sidwell spoke with Lopez and Nisa. Lopez repeated his version of events, but Dr. Sidwell was skeptical. During the State's direct examination, Dr. Sidwell opined, “[H]er injury situation is very suspicious for a nonaccidental trauma, meaning she didn't just accidentally fall out of a high chair.”

Dr. Sidwell called in neurosurgeon John Piper to join R.A.'s trauma team that morning. Dr. Piper also evaluated R.A. in the emergency room. His primary concern centered on the fact R.A. “was in a very deep coma and was having

problems breathing spontaneously.” R.A.’s trauma team ordered scans to identify potential head injuries.

According to Dr. Piper, the preliminary scans demonstrated

evidence of hemorrhage around the surface of [R.A.’s] brain or in the spinal fluid spaces. None of those hemorrhages were large where we could go in and maybe help with the pressure. They were very thin little layers of blood, but there were many areas of hemorrhage that we could see.

When asked by the prosecutor whether R.A.’s injuries were consistent with falling from a highchair, Dr. Piper responded, “No, they were not.” He elaborated,

[W]e see people all the time that fall out of high chairs or shopping carts, and of those people that we see, it’s probably far less than ten percent of them that actually have found to have an injury at all. And of the injuries that they do have, typically they’re very, you know, more mild. There are people who have maybe just a tiny little spot of blood or a small crack in the bone . . . . So her condition was way worse than the typical condition someone would have from a simple fall.

Dr. Piper was even more alarmed after reviewing R.A.’s autopsy and learning she suffered axonal tears:

[A]xonal injury is different because axonal injury tells us that there have been forces that are different than just a simple fall. It implies that there’s either flexion, extension, and rotation that occurs to the head because those fibers—what “axonal” means is that the fibers called the axons of the nerve are sheared, so a certain number of them will be lost from that shearing motion. So it implies something much more than just a simple . . . fall.

It is seen most commonly in patients literally that are thrown out of vehicles in an accident. So if someone is driving sixty miles an hour and they hit a structure and are thrown through the windshield and tumble and roll literally sixty to a hundred feet sometimes away from their vehicle, those people will oftentimes come in with the shear injury. So it’s usually associated with very severe injuries that involve a rapid back and forth movement or rotational movements. So it’s something you just don’t see from a fall.

When radiologist Bradley King reported for his shift the morning of November 29, he found the overnight radiologist had already performed scans of R.A.'s head and cervical spine. When reviewing those images, Dr. King noted additional posterior medial rib fractures. Dr. King testified, "Posterior medial rib fractures are considered to be a classic sign of child abuse."

The State asked the radiologist if he could delineate a timeline of the injuries he saw through imaging. Dr. King said he assumed fractures were acute<sup>1</sup> unless otherwise noted, "which means if I had seen a fracture that was in a state of healing or I felt that the fracture was old, then I would have noted that in my report." Because he saw no signs of healing, he opined the rib fractures occurred within "probably a week or less."

Pediatrician Kenneth McCann examined R.A. in the afternoon on November 29. Dr. McCann, a child abuse specialist, also reviewed R.A.'s chart and spoke with Nisa. After his consultation, Dr. McCann concluded R.A.'s injuries were inconsistent with falling from a high chair.

Attending R.A.'s autopsy provided Dr. McCann additional insight. The autopsy revealed mesentery bruising. Dr. McCann testified, "[R.A.] had two C-shaped bruises on her abdomen. And we know abdominal bruising is a high red flag for bruising deeper down. So that sort of puts two-and-two together in my head."

Dr. McCann testified regarding the timing of R.A.'s injuries. He described the skull fracture as "acute, immediately symptomatic. The minute that happened

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<sup>1</sup> Dr. King described "acute" as meaning "the injury happened recently."

she would be unconscious.” He also confirmed R.A. had “fresh rib fractures.” But Dr. McCann did not “feel comfortable” saying “the ribs had to have happened at the same time as the skull fracture.”

Later in the week, radiologist Brent Steinberg joined R.A.’s trauma team. Acting as a fresh set of eyes, Dr. Steinberg reviewed R.A.’s images. Like the two other radiologists, Dr. Steinberg believed R.A.’s injuries were caused by “potential nonaccidental trauma.” In reaching that opinion, he considered (1) the complexity of the skull fractures, (2) the quantity of blood between the brain and skull bone, and (3) the number of rib fractures. To him, the rib fractures were the most telling injury because of the significant force necessary to break the first and second ribs. He also noted the fractures were equidistant from the spine, which “is unusual to have in anything other than nonaccidental trauma.” According to Dr. Steinberg, the mechanism usually causing this type of rib fracture is “an excessive hard squeeze.”

In the days after R.A.’s hospital admission, the doctors tried to keep her stable but soon realized her brain swelling was “bad enough that it would be a fatal situation without a drastic intervention.” That drastic intervention was a decompressive craniotomy.<sup>2</sup> But the procedure was ultimately unsuccessful. On December 3, 2014, R.A. succumbed to her head injuries.

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<sup>2</sup> Dr. Piper described a decompressive craniotomy as trying to give the brain more room to swell. . . . We will go in and make a skin incision and we will take out the bone, so in her situation it would be left-sided. We would take out a large section of the bone and we will actually freeze that bone so we can put it in later on.

But what we’re able to do then is we’re able to sew in a very large patch of basically material that’s much like the covering of the brain, and it will allow the swelling to swell outward and the skin will be able to

Two days later, Polk County Medical Examiner Gregory Schmunk performed R.A.'s autopsy. He described R.A.'s mesentery injury as "not more than several days, maybe out five to seven days, old." He concluded, "[F]alling from a highchair onto your back—the history was that she was found on her back facing up—would not cause this type of an injury." Dr. Schmunk estimated the rib fractures were less than one week old at the time of the autopsy. Dr. Schmunk attributed the injuries to "an abusive act, a physical squeezing of the chest by another person, certainly an adult." Dr. Schmunk certified the cause of R.A.'s death as craniocerebral trauma—in other words, "injury to the brain and skull." Dr. Schmunk testified "within a reasonable degree of medical certainty" he determined the manner of death was "homicide or the act of another person on her."

In January 2015, the State charged Lopez with first-degree murder and child endangerment resulting in death. His first jury trial ended in a mistrial. After the second trial, the jury returned guilty verdicts on both counts. The district court entered judgment for first-degree murder, sentencing Lopez to life imprisonment.<sup>3</sup> Lopez appeals.

## **II. Scope and Standards of Review**

We review challenges to the sufficiency of the evidence for correction of errors at law. *State v. Schlitter*, 881 N.W.2d 380, 388 (Iowa 2016) (citing *State v. Neiderbach*, 837 N.W.2d 180, 190 (Iowa 2013)). We review evidentiary rulings for

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accommodate that because it can stretch . . . . And then later on if someone is able to survive that, then we can put the bone flap back on.

<sup>3</sup> Under the one-homicide rule, the district court withheld judgment and sentence on the conviction for child endangerment resulting in death. See *State v. Fix*, 830 N.W.2d 744, 749 (Iowa Ct. App. 2013).

an abuse of discretion. *State v. Tyler*, 867 N.W.2d 136, 152 (Iowa 2015) (citing *State v. Elliot*, 806 N.W.2d 660, 667 (Iowa 2011)). Likewise, we review the district court's ruling on Lopez's objection to the prosecutor's closing argument for an abuse of discretion.<sup>4</sup> See *Coleman*, 907 N.W.2d at 134. We review of ineffective-assistance-of-counsel claims de novo. *Schlitter*, 881 N.W.2d at 388 (citing *State v. Tompkins*, 859 N.W.2d 631, 636 (Iowa 2015)).

### III. Analysis

#### A. To A Reasonable Degree of Medical Certainty

R.A.'s cause of death emerged as the fighting issue at Lopez's trial. To prove causation, the State called six doctors. The defense answered with two of its own medical experts. Of the eight total doctors, seven testified they were giving their opinion "to a reasonable degree of medical certainty." Four of those seven witnesses offered a definition of "a reasonable degree of medical certainty."<sup>5</sup>

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<sup>4</sup> Lopez argues prosecutorial error is a constitutional claim subject to de novo review. He urges the supreme court to clarify the standard of review. Our supreme court has repeatedly reviewed claims of prosecutorial misconduct for an abuse of discretion, except in the ineffective-assistance context. Compare *State v. Coleman*, 907 N.W.2d 124, 134 (Iowa 2018), *Neiderbach*, 837 N.W.2d at 190, and *State v. Krogmann*, 804 N.W.2d 518, 523 (Iowa 2011) with *Schlitter*, 881 N.W.2d at 388. Accordingly, we do the same.

<sup>5</sup> (1) Dr. McCann testified:

When I look at a case and come to an opinion that another physician of similar education, similar background, similar training, similar experience looking at the same case would come to a similar opinion as mine. There may not be 100 percent agreement on every detail, but overall they come to the same opinion as I would.

(2) Dr. Steinberg testified: "[N]othing is 100 percent or completely black and white in medicine. . . . So you would show what somebody with your similar training and background would come to the same conclusion, I think, is what I would probably say would be good medical certainty."

(3) Dr. Thomas Carlstrom testified for the defense: "In civil cases it's greater than 50 percent" and he believed reasonable degree of medical certainty had no bearing in criminal cases. "As far as I know—this is what I've always been told in my testifying—greater than 50 percent."

As mentioned in our opening paragraph, this phrase is central to two of Lopez’s appellate issues: (1) the sufficiency of the evidence and (2) trial counsel’s failure to request a jury instruction. Before addressing those issues, we briefly explore the legal concept of “a reasonable degree of medical certainty.”

In our legal lexicon, it means “[a] standard requiring a showing that the injury is more likely than not caused by a particular stimulus, based on the general consensus of recognized medical thought.” *Reasonable Medical Certainty*, *Black’s Law Dictionary* (10th ed. 2014). But legal scholarship has documented the lack of an “agreed-upon meaning” for the phrase “reasonable degree of medical certainty.” See, e.g., Lucy Johnston-Walsh et. al., *The Unreasonably Uncertain Risks of “Reasonable Medical Certainty” in Child Abuse Cases: Mechanisms for Risk Reduction*, 66 *Drake L. Rev.* 253, 255 (2018) (“[T]here is a range of meanings attributed to this phrase by attorneys, judges, and testifying witnesses, is a high risk of expert testimony being misinterpreted with potential false convictions or improper exonerations in child abuse cases.”).

In some jurisdictions, courts have struggled with the evidentiary standard for the admissibility of medical testimony. See, e.g., *Dallas v. Burlington Northern, Inc.*, 689 P.2d 273, 277 (Mont. 1984) (“Although we still formally adhere to a

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(4) Dr. Bradley Randall also testified for the defense: “My definition of ‘reasonable medical certainty’ is a level of certainty a physician needs to make a diagnosis.” He said the level of certainty necessary

depends on the circumstance. If you go into the doctor with a sore throat and they say, “Gee, this looks like strep throat, I’m going to give you an antibiotic and send you home,” if they’re wrong, the consequences aren’t terribly high. So their level of certainty doesn’t have to be extremely high.

On the other hand, if the doctor says, “Gee, I think you have lung cancer, we’re going to take your lung out,” that physician better be very, very certain before they take your lung out.

'reasonable medical certainty' standard, the term is not well understood by the medical profession. Little, if anything, is 'certain' in science. The term was adopted in law to assure that testimony received by the fact finder was not merely conjectural but rather was sufficiently probative to be reliable. We are striving for, what in fact, is a probability rather than a possibility.”), *superseded by statute*, 2011 Mont. Laws 618, *as recognized in Ford v. Sentry Cas. Co.*, 282 P.3d 687 (Mont. 2012); *Bara v. Clarksville Mem’l Health Sys., Inc.*, 104 S.W.3d 1, 5 n.1 (Tenn. Ct. App. 2002) (decrying use of “magic words”). Other jurisdictions have embraced the meaning of the phrase. *See, e.g., Clifford v. United States*, 532 A.2d 628, 640 (D.C. 1987) (“This standard of ‘reasonable’ medical certainty, reflects an objectively well founded conviction that the likelihood of one cause is greater than any other; it does not mean the expert is ‘personally certain’ of the cause, or that the cause is discernible to a certainty.” (internal citation omitted)).

In Iowa case law, we have “no requirement that the expert be able to express an opinion with absolute certainty. A lack of absolute certainty goes to the weight of the expert’s testimony, not to its admissibility.” *Tyler*, 867 N.W.2d at 153 (quoting *Johnson v. Knoxville Cmty. Sch. Dist.*, 570 N.W.2d 633, 637 (Iowa 1997)). To be considered by a jury contemplating the cause of death, witnesses need only entertain a “reasonable degree of medical certainty” for their opinions.<sup>6</sup> *Id.* The trial court must first act as the gatekeeper in deciding if the expert evidence is

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<sup>6</sup> In *Hansen v. Central Iowa Hospital Corp.*, the court clarified “[t]he rule is that expert testimony indicating probability or likelihood of a causal connection is sufficient to generate a question on causation . . . . Buzzwords like ‘reasonable degree of medical certainty’ are therefore not necessary to generate a jury question on causation.” 686 N.W.2d 476, 485 (Iowa 2004).

legally sufficient to warrant finding a causal connection. *Id.* Then the jury steps in to decide if the causation evidence is persuasive beyond a reasonable doubt. *Id.*

The requirement that the State prove all elements of a crime beyond a reasonable doubt is “qualitatively different” in its application than the evidentiary measure of medical causation. See *State v. Webb*, 309 N.W.2d 404, 413–14 (Iowa 1981) (quoting *Commonwealth v. Stoltzfuz*, 337 A.2d 873, 879 (Pa. 1975)). In *Webb*, three doctors testified as to the cause of the victim’s death, stating their opinions were based upon a reasonable degree of medical certainty. *Id.* at 413. *Webb* objected, asserting the required standard for such testimony in a criminal case should be proof beyond a reasonable doubt. *Id.* The supreme court rejected *Webb*’s assertion. *Id.* at 414.

With these principles in mind, we turn to Lopez’s sufficiency argument.

### **B. Sufficiency of the Evidence**

Lopez contends the State failed to offer sufficient proof to convict him of first-degree murder. Particularly, he calls into question the medical evidence. In his view, “[w]ithout sufficient proof that the injuries were inflicted by Lopez, the jury was only left to speculate what caused RA’s death.”

To convict Lopez of first-degree murder, the State had to prove:

1. On or about November 29, 2014, the defendant struck, slammed, squeezed and/or shook [R.A.].
2. [R.A.] died as a result of being struck, slammed, squeezed and/or shook.
3. The defendant acted with malice aforethought.
4. Either
  - (a) The defendant acted willfully, deliberately and premeditatedly and with the specific intent to kill [R.A.];
  - OR

(b) [R.A.] was a child and, under circumstances manifesting an extreme indifference to human life, the defendant either:

1. Assaulted [R.A.] as defined in Instruction No. 22.<sup>7</sup>

OR

2. Committed child endangerment against [R.A.] as defined in Instruction No. 23.<sup>8</sup>

Lopez asserts the State did not satisfy any of the elements because R.A. received her injuries in an accidental fall.

In reviewing a challenge to the sufficiency of the evidence supporting a guilty verdict, we consider all evidence in the record, including all reasonable inferences that may be fairly drawn from the evidence. *Neiderbach*, 837 N.W.2d at 216. When we find substantial evidence in the record to support the jury's verdict, we uphold it. *Id.* (citing *Sanford*, 814 N.W.2d at 615). Evidence is substantial if, "when viewed in the light most favorable to the State, it can convince a rational jury that the defendant is guilty beyond a reasonable doubt." *Id.* (quoting *Sanford*, 814 N.W.2d at 615). The jury is free to reject and credit evidence as it finds appropriate. *Id.*

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<sup>7</sup> Instruction number 22 provided:

An "Assault" is committed when a person does an act which is intended to either cause pain or injury to another person; or result in physical contact which will be insulting or offensive to another person; or place another person in fear of immediate physical contact which will be painful, injurious, insulting or offensive to the other person, when coupled with apparent ability to do the act.

<sup>8</sup> Instruction number 23 read:

A person commits "Child Endangerment" when the person was a person having custody or control over the child or was a person who was a member of the same household where the child resided, by an intentional act or series of intentional acts, uses reasonable force, torture or cruelty, which results in bodily injury or that is intended to cause serious injury.

Lopez insists the State's proof fell short because its experts reached their opinions R.A.'s injuries resulted from abuse only "to a reasonable degree of medical certainty." He maintains medical certainty means "more likely than not," citing *Black's Law Dictionary*, and "more likely than not" cannot satisfy the State's burden of proving the allegations beyond a reasonable doubt.<sup>9</sup> But our supreme court rejected a similar cause-of-death argument in *Webb*, 309 N.W.2d at 413–14. And we do the same here.

Lopez contends his case is distinct because the State relied solely upon expert testimony to prove he inflicted the injuries. Even assuming expert testimony grounded in a reasonable degree of medical certainty would alone be insufficient to convict, the State offered more than the medical evidence to incriminate Lopez. For instance, the State provided testimony from investigators Lopez, by his own admission, was the only adult caring for R.A. when she suffered her head injury. And Nisa testified when Lopez woke her to say they needed to rush R.A. to the

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<sup>9</sup> In his appellant's brief, Lopez also alleges a weakness in the prosecution because the State's medical experts based their opinions on anecdotal data and literature. He alleges these sources form impermissible bases for expert testimony in light of the evolving nature of medicine and the possibility that "[r]easonable doctors may differ over various analyses of findings." But Lopez cites no law in support of his contention expert testimony based on respected literature and experience in the field cannot support a jury's finding of guilt beyond a reasonable doubt. In fact, Iowa Rule of Evidence 5.703 provides:

An expert may base an opinion on facts and data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted.

Further, Lopez does not challenge the admissibility of the expert testimony on these grounds. See generally 7 Laurie Kratky Dore, *Iowa Practice Series: Evidence* § 5.702:3 (Nov. 2018 Update) (explaining for their testimony to be admissible, expert witnesses must have "adequate 'knowledge, skill, experience, training, or education'" forming the basis for his or her opinion on the subject matter). Accordingly, this sufficiency-of-the-evidence argument fails.

hospital, he had already fully dressed the toddler in her winter coat and boots. Lopez controlled the narrative from there on, telling Nisa while they drove to the hospital that R.A. fell from her high chair. Once at the hospital, Lopez directed Nisa to park the car while he took R.A. inside to explain the situation to emergency-room staff.

On the issue of intent and motive, the State presented testimony from Nisa's landlady, who lived upstairs. The landlady recalled overhearing Lopez yell at the children to "shut the fuck up" in the early morning hours several times in the fall of 2014.<sup>10</sup> After Lopez grew angry during an argument over Nisa's rent in early November 2014, the landlady told Lopez he was no longer welcome to live in the basement. Afterward, Lopez would sneak into Nisa's apartment. The prosecutor summed up the situation in closing argument: "He's sneaking in and out of the window now. So you have to consider how would you handle your stress if you can't yell at the kids anymore?"

All in all, the State's case did not rely solely on expert testimony. Admittedly, the experts did not speak with one voice. Defense expert Dr. Carlstrom disagreed with the State's experts who opined R.A.'s injuries could not have resulted from a high chair fall. But the jury found the State's experts more credible, as juries are entitled to do in a "battle-of-the-experts case." See *State v. Jacobs*, 607 N.W.2d 679, 685 (Iowa 2000) ("The . . . trier of fact is not obligated to accept opinion

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<sup>10</sup> Although we preserve a claim of ineffective assistance of counsel involving this evidence, we may consider it when evaluating the sufficiency of the evidence. See *State v. Dullard*, 668 N.W.2d 585, 597 (Iowa 2003) ("In determining whether retrial is permissible all the evidence admitted during the trial, including erroneously admitted evidence, must be considered.").

evidence, even from experts, as conclusive. When a case evolves into a battle of experts, we, as the reviewing court, readily defer to the [fact finder]’s judgment as it is in a better position to weigh the credibility of the witnesses.”).

The State experts testified—and the defense experts agreed—R.A.’s brain injury would have been immediately symptomatic. Lopez admits R.A. was in his exclusive care when she sustained the skull fracture. The State presented five experts who testified, based upon their knowledge and experience, R.A.’s brain injuries were inconsistent with an accidental fall from a highchair. The experts further opined the nature of R.A.’s rib and mesentery injuries bolstered their conclusions. Considering the entire record, the jury’s verdict was supported by substantial evidence. *See Neiderbach*, 837 N.W.2d at 212 (“Although none of the State’s physician witnesses were willing to rule out the *possibility* that E.N.’s arm had been broken in the manner Jonas described, they all agreed that his version was highly unlikely.”).

### **C. Ineffective Assistance of Counsel**

We turn next to Lopez’s complaints about his trial attorney’s performance, starting with his allegation counsel should have requested a jury instruction defining a reasonable degree of medical certainty.

We apply the familiar *Strickland*<sup>11</sup> standard for ineffective assistance claims. Lopez must show by a preponderance of the evidence (1) counsel failed to perform an essential duty and (2) prejudice resulted. *See Coleman*, 907 N.W.2d at 141. We don’t always need to address both elements—failure to prove either prong

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<sup>11</sup> *Strickland v. Washington*, 466 U.S. 668, 689 (1984)).

defeats a claim. *Id.* (citing *Nguyen v. State*, 878 N.W.2d 744, 754 (Iowa 2016)). Counsel breaches an essential duty by performing “below the standard of a reasonably competent attorney.” *Id.* (quoting *Ledezma v. State*, 626 N.W.2d 134, 142 (Iowa 2006)). Recognizing the challenge in devising a trial strategy, we afford attorneys a strong presumption that their “conduct falls within the wide range of reasonable professional assistance[.]” *Id.* (quoting *Nguyen*, 878 N.W.2d at 752). “Failure to raise a meritless issue does not establish counsel’s performance was deficient.” *Krogmann v. State*, 914 N.W.2d at 307 (Iowa 2018) (citing *State v. Harris*, 891 N.W.2d 182, 186 (Iowa 2017)).

We preserve ineffective-assistance claims for postconviction relief unless the record is adequately developed for resolution on direct appeal. *State v. Clay*, 824 N.W.2d 488, 500 (Iowa 2012).

1. *Instruction on Reasonable Degree of Medical Certainty*

Lopez contends his trial counsel should have asked for a jury instruction defining reasonable degree of medical certainty. As chronicled above, several expert witnesses used the phrase when describing the level of certainty backing their causation opinions. While three expert witnesses used the term without defining it, four experts did venture to explain the term during their testimony.

On appeal, Lopez argues the phrase required a legal definition. He contends the expert opinions were “meaningless without an understanding of the level of certainty to which each was held.” Lopez insists, “It was also important for the jury to have an understanding of the difference between the level of proof for the doctors’ opinions compared to the level of proof required for a guilty verdict.” He urges trial counsel had an essential duty to request a definitional instruction.

Because no uniform instruction exists, he suggests the *Black's Law Dictionary* definition quoted above.

Lopez asserts counsel's omission resulted in prejudice because the jurors were unable to properly weigh the expert testimony considering they "did not know whether the opinions rose to a level above speculation and suspicion."

Although we find it troubling the experts provided varying definitions of the term when their testimony was fundamental to the case, the propriety of their usage is not before us. Instead, we examine trial counsel's duty to request a novel jury instruction.<sup>12</sup>

Trial courts are obliged to "instruct the jury as to the law applicable to all material issues in the case." See Iowa R. Civ. P. 1.924; see also Iowa R. Crim. P. 2.19(5)(f) ("The rules relating to the instruction of juries in civil cases shall apply to the trial of criminal cases."). In the context of ineffective assistance, attorneys may satisfy the standard of normal competency even if they do not insist the trial court give every instruction to which their clients are entitled. See *State v. Broughton*, 450 N.W.2d 874, 876 (Iowa 1990). When deciding if counsel breached an essential duty by failing to offer a particular instruction, we must look to the theory of defense employed in the case. See *State v. Virgil*, 895 N.W.2d 873, 879 (Iowa 2017).

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<sup>12</sup> The lack of a uniform instruction on this issue supports our ultimate conclusion. See *State v. Ambrose*, 861 N.W.2d 550, 563 (Iowa 2015) ("Normally, we are slow to disapprove of the uniform jury instructions."). In addition, we do not expect trial counsel to be a "crystal gazer" who can predict future changes in established law. See *State v. Schoelerman*, 315 N.W.2d 67, 72 (Iowa 1982).

Lopez's trial strategy was to dispute the opinion of the State's experts on cause of death. But we are not convinced the definitional instruction he proposes on appeal would have advanced that defense theory.

The district court assembled a comprehensive set of instructions which provided the jurors the law governing the material issues in the case. Particularly on cause of death, the court instructed the jury the State had to prove R.A. died "as a result of being struck, slammed, squeezed and/or shook" by Lopez. And the court made clear that the State had the burden to prove the causation element (and all other elements of the crimes) "by evidence beyond a reasonable doubt" before returning a guilty verdict. The court also instructed the jury on the definition of reasonable doubt. As for the medical causation evidence, the court instructed the jury to "[c]onsider expert testimony just like any other testimony." Under that instruction, the jurors could give the expert testimony as much weight as they thought it deserved, considering the expert's education, experience, and his or her reasons given for the opinion.

What Lopez now claims was missing from those instructions was a definition of medical certainty as "more likely than not." Lopez's proposal embodies a correct principle of law—but one outside the purview of the jury. The "reasonable certainty" or probability of the expert's opinion on causation is the test for admissibility of that testimony. See *Tyler*, 867 N.W.2d at 153; see also *Ranes v. Adams Labs., Inc.*, 778 N.W.2d 677, 686 (Iowa 2010) ("Although it is the province of the jury to evaluate the credibility of expert witnesses, trial courts have a well-recognized role as guardians of the integrity of expert evidence offered at trials."). Once the court finds the expert testimony sufficiently certain for a party to

present to the jury, the jury's task is to decide if the State proved causation beyond a reasonable doubt. See *Tyler*, 867 N.W.2d at 153. The jury did not need information to retrace the admissibility determination.<sup>13</sup> See generally *State v. Hamann*, 285 N.W.2d 180, 186 (Iowa 1979) (rejecting consequence-of-not-guilty-by-reason-of-insanity instruction because "such information is irrelevant to the jury's proper function"). Counsel's failure to request an instruction defining medical certainty did not amount to a breach of duty.

## 2. *Prior Bad Acts*

Lopez next argues trial counsel was ineffective for failing to object to the landlady's testimony about his early-morning yelling as prior bad acts. See Iowa R. Evid. 5.404(b). The landlady testified about one particular incident when noises coming from the basement apartment woke her from sleep. She recalled around "3:00 or 4:00 in the morning," she heard "children crying, TV, radio, and [Lopez] was yelling" profanities at the children. She subsequently told the couple Lopez was no longer welcome to stay in the basement apartment.

The State believes the landlady's testimony had a proper purpose—to prove Lopez's motive or lack of accident. See *State v. Nelson*, 791 N.W.2d 414, 425

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<sup>13</sup> The Tennessee Court of Appeals came to a similar conclusion. In *Miller v. Choo Choo Partners, L.P.*, the plaintiff sued the defendant for injuries sustained after a slip and fall. 73 S.W.3d 897, 900 (Tenn. Ct. App. 2001). When the defendant requested a jury instruction about causation, the trial court declined. The court of appeals held

The defendant's proposed instruction regarding the requirement that expert testimony on causation be "reasonably certain" embodies a correct principle of law. However, we do not find that it was error not to instruct the jury as to this principle. That an expert's testimony is "reasonably certain" is said to be a prerequisite to the admissibility of that testimony. The admissibility of expert testimony is a matter of law for the court, not the jury. The trial court did not err in refusing to give this instruction.

*Id.* at 909 (citations omitted).

(Iowa 2010) (approving admission of other bad acts evidence “if there is a noncharacter theory of relevance and the evidence is material to a legitimate issue other than the defendant’s general criminal disposition”).

Iowa Rule of Evidence 5.404(b) prohibits the use of “evidence of a crime, wrong, or other bad act . . . to prove a person’s character in order to show that on a particular occasion the person acted in accordance with the character.” The supreme court has articulated a three-step analysis to determine admissibility:

- (1) [T]he evidence must be relevant and material to a legitimate issue in the case other than a general propensity to commit wrongful acts;
- (2) there must be clear proof the individual against whom the evidence is offered committed the bad act or crime; and
- (3) if the first two prongs are satisfied, the court must then decide if [the evidence’s] probative value is substantially outweighed by the danger of unfair prejudice to the defendant.

*State v. Richards*, 879 N.W.2d 140, 145 (Iowa 2016) (second alteration in original) (emphasis omitted) (quoting *State v. Sullivan*, 679 N.W.2d 19, 25 (Iowa 2004)).

We find the record inadequate to address this claim on direct appeal. We cannot discern counsel’s state of mind when he declined to object to the landlady’s testimony. See *Clay*, 824 N.W.2d at 500. Accordingly, we preserve the prior-bad-acts claim for possible postconviction-relief proceedings to allow trial counsel an opportunity to respond to Lopez’s claim. See *State v. Harrison*, 914 N.W.2d 178, 208–09 (Iowa 2018) (quoting *State v. Soboroff*, 798 N.W.2d 1, 8 (Iowa 2011)).

#### **D. Willingness to Take a Polygraph**

In an issue preserved for our review, Lopez contends the district court abused its discretion by excluding evidence of his “consciousness of innocence.” The excluded evidence was an uncounseled statement by Lopez to law enforcement agreeing to polygraph testing.

On the day R.A. died, Iowa Division of Criminal Investigation Agent Don Schnitker interviewed Lopez. Clive Police Detective Vernon Lukehart watched the interview by closed-circuit television. Toward the conclusion of the interview, Agent Schnitker asked Lopez if he would be willing to submit to a polygraph examination. Lopez agreed. But before the agent conducted the polygraph, Lopez received word of the toddler's death. Lopez returned to the hospital. He then talked to a lawyer, who advised against taking the polygraph.

Before trial, the State objected to the defense plan to offer Lopez's statement of willingness to take the polygraph. The prosecutor urged if the defense could offer Lopez's initial agreement, the State would be entitled "to bring up the fact that he asked not to take the polygraph because he hired a lawyer." The district court sided with the State, reasoning

as you all know, those lie detector results are inherently unreliable in Iowa. And, if the results are unreliable regardless of what those results might have been, if this process had gotten that far, to me, that makes any inferences arising from taking or not taking the polygraph also inherently unreliable.

Lopez asserts the district court's exclusion of this evidence amounted to an abuse of discretion, particularly when the State was able to introduce the remaining content of his interview through the testimony of Agent Schnitker and Detective Lukehart.

Polygraph results are inadmissible in Iowa based on concerns of fairness and reliability. See, e.g., *State v. Conner*, 241 N.W.2d 447, 458–59 (Iowa 1976); *State v. Countryman*, 573 N.W.2d 265, 266 (Iowa 1998). While our supreme court has not decided whether *willingness* to take a polygraph should be treated differently, the majority of jurisdictions that have encountered this question have

excluded such evidence. See *DeBlase v. State*, \_\_\_ So.3d \_\_\_, \_\_\_, 2018 WL 6011199, at \*36 (Ala. Crim. App. 2018) (collecting cases and observing “numerous other jurisdictions have addressed the issue and they have almost universally held that a defendant’s offer to take a polygraph test is generally inadmissible.”); see also 3 Barbara E. Bergman, Nancy Hollander, & Theresa M. Duncan, *Wharton’s Criminal Evidence* § 13:42 (15th ed. Oct. 2018 Update) (“[M]ost jurisdictions also exclude a defendant’s statement of willingness to take a polygraph on the grounds of relevance.”); 7 Clifford S. Fishman & Anne T. McKenna, *Jones on Evidence* § 53:14 (Dec. 2017 Update) (providing a state-by-state rundown on admissibility of polygraph evidence, including willingness to take a polygraph); George E. Dix et al., *McCormick on Evidence* § 206 (7th ed. June 2016 Pocket Part) (“First, there is the traditional rule that the test results are inadmissible when offered by either party, either as substantive evidence or as relating to the credibility of a witness. As a corollary, the willingness or unwillingness of a party or witness to submit to examination is also inadmissible.” (footnotes omitted)).

Courts excluding polygraph-willingness reason because the results of the polygraph are inadmissible, an offer to submit to a test

is a self-serving act undertaken with no possibility of any risk. If the offer is accepted and the test given, the results cannot be used in evidence whether favorable or unfavorable. In these circumstances, the sincerity of the offer can easily be feigned, making any inference of innocence wholly unreliable.

*Commonwealth v. Martinez*, 769 N.E.2d 273, 278–79 (Mass. 2002).

Without guidance from our supreme court, we decline to impose a bright-line restriction on admissibility of willingness to take a polygraph examination. We can imagine a scenario where a suspect’s offer to take a polygraph test would be

relevant to the state of mind of the person making the offer.<sup>14</sup> See *State v. Santana-Lopez*, 613 N.W.2d 918, 921 (Wis. Ct. App. 2000) (finding an offer to take a polygraph may reflect a consciousness of innocence if the person making the offer believes the test would be possible, accurate, and admissible). But that scenario is not before us now.

And as the prosecutor emphasized before trial, Lopez's original assent to the agent's offer of a polygraph was quickly revoked after R.A.'s death and Lopez obtained counsel. Allowing his initial willingness into evidence under these circumstances would have created a substantial risk of confusing the issues and misleading the jury. See Iowa R. Evid. 5.403. Accordingly, the district court did not abuse its discretion.

#### **E. Medical Examiner's Manner-of-Death Testimony**

Lopez next contests the district court's ruling on the admissibility of the medical examiner's opinion on the manner of death. Before trial, the defense asked the court to bar Dr. Schmunk from sharing his opinion R.A. died as a result of a homicide, or in other words, by "the act of another person on her." The court allowed the testimony.

On appeal, Lopez cites *State v. Tyler*, in which our supreme court determined expert testimony on manner of death was inadmissible when the opinion was based "largely on witness statements or information obtained through

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<sup>14</sup> Like evidence of consciousness of guilt, evidence of consciousness of innocence may be "probative to actual guilt with respect to the crime charged[.]" See *State v. Wilson*, 878 N.W.2d 203, 212 (Iowa 2016) (describing the parameters for admission of evidence of flight to prove consciousness of guilt). But here, Lopez did not offer any additional evidence supporting an inferential chain between his willingness to take a polygraph and his consciousness of innocence. See *id.* at 213.

police investigation.” 867 N.W.2d at 162 (citing Iowa R. Evid. 5.702). Under those circumstances, the manner-of-death opinion was unhelpful to the jury. Lopez contends Dr. Schmunk’s testimony was likewise improper because Dr. Schmunk noted Lopez’s statement was “important in what it lacked” and was inconsistent with the autopsy findings.

Lopez’s reliance on *Tyler* is misplaced. In *Tyler*, the expert witness admitted he was “unable to reach a conclusion” on both cause and manner of death, and the “*only* way he reached his final opinions” was through referencing the defendant’s statements to police. 867 N.W.2d at 164. By contrast, Dr. Schmunk testified he reached his opinion on the manner of death “irrespective really of the information that was given to [him] prior to the death.” In his deposition, Dr. Schmunk noted:

Had [Lopez] provided a story that was consistent with the findings, then that would have possibly, depending on what the story was, would have possibly given me something else to consider. However, it would be extremely unlikely to the point that I can’t imagine a scenario that would have caused the injuries in this case, other than at the hands of another.

Unlike the expert in *Tyler* who based his opinion on witness statements, Dr. Schmunk testified his manner-of-death opinion was based on his autopsy findings, but witness statements potentially could have changed his findings. *Cf. id.* at 163–64. The district court properly admitted Dr. Schmunk’s testimony about the manner of death. *See id.* (“When a medical examiner bases his or her opinion on cause or manner of death primarily on the autopsy, such opinions will likely assist the jury in understand the evidence and would ordinarily be admissible.”).

## F. Prosecutorial Error

In his final claim, Lopez flags an alleged error in the State's closing argument.<sup>15</sup> Like the first two issues on medical certainty addressed earlier in this decision, this allegation centers on the expert testimony. In rebuttal, the prosecutor argued:

You have the doctors that are all telling us that the most reasonable explanation for this is inflicted trauma and abuse. There's a possible possibility, this rare circumstance. But think of it like this. That's a rare circumstance for each and every one of those nine injuries. That would be like winning the lottery nine times in one event. That's not reasonable.

Defense counsel made a record outside of the presence of the jury, objecting to the prosecutor's "phony math" analogy. Counsel asked the court to admonish the jurors to disregard the State's argument concerning statistical probability, but did not believe the statement rose to the level of "mistrial material" at that point. In support of its objection, the defense cited *People v. Collins*<sup>16</sup> as the "seminal case" on improper use of mathematical-probability arguments.

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<sup>15</sup> Our supreme court recognizes a distinction between misconduct and less egregious missteps by a prosecutor. *Schlitter*, 881 N.W.2d at 394. Prosecutorial misconduct marks an intentional breach or reckless disregard of clear standards of law or professional obligations. *Id.* Prosecutorial error covers instances where the State's attorney uses reasonable care but exercises poor judgment or makes a mistake. *Id.*

<sup>16</sup> In *People v. Collins*, the prosecutor called a mathematician in an attempt to establish, assuming the crime was committed by any two people with the distinct characteristics of those seen by the eye witnesses, there was "an overwhelming probability" the crime was committed by "any couple answering such distinctive characteristics." 438 P.2d 33, 36–37 (Cal. 1968). The prosecutor then "proceeded to have the witness [a]ssume probability factors for the various characteristics which he deemed to be shared by the guilty couple and all other couples answering to such distinctive characteristics." *Id.* Then, "[a]pplying the product rule to his own factors," the prosecutor concluded the probability "any couple possessed the distinctive characteristic[s] of the defendants" was one in twelve million. *Id.* The court determined this amounted to prejudicial error because the testimony lacked foundation and distracted the jury. *Id.* at 38.

After taking a brief recess to review *Collins*, the district court overruled defense counsel's objection and declined to instruct the jury to disregard the lottery statement. But, upon the jurors' return, the court did remind them that closing arguments were not evidence and the State had the burden of proving Lopez guilty beyond a reasonable doubt.

On appeal, Lopez argues the State's lottery statement was prosecutorial error for two related reasons: (1) it was "not a reasonable inference from the evidence" and (2) it was "improper use of a statistical analogy." Supporting the first ground, Lopez notes the doctors' opinions that it would be rare for a highchair fall to cause the grave injuries suffered by R.A. came with no calculation of mathematical probability. Accordingly, Lopez argues, the lottery analogy was not a fair summary of the experts' conclusions. Further, Lopez points to the lack of evidence regarding the odds of winning the lottery. Without such evidence, Lopez maintains it is baseless to compare the likelihood of R.A.'s injuries with winning the lottery.

On the second ground, Lopez asserts the prosecutor improperly invoked the "product rule," which suggests "the probability of the joint occurrence of a number of a mutually independent events is equal to the product of the individual probabilities that each of the events will occur." See *id.* at 36. Lopez quotes *Wilson v. State*, which states, "A problem arises when dependent variables are treated as independent ones." 185 S.W.3d 481, 487 (Tex. Crim. App. 2006) (Johnson, J., concurring). Lopez points to the lack of evidence regarding the independence of each injury R.A. sustained, maintaining without such proof, the product rule cannot

be applied. For these reasons, Lopez concludes, he was deprived of his right to a fair trial.<sup>17</sup>

To prevail in his claim of prosecutorial error, Lopez must first prove the statement was improper, and second, it resulted in prejudice. See *State v. Graves*, 668 N.W.2d 860, 869 (Iowa 2003); see also *Schlitter*, 881 N.W.2d at 394 (noting the *Graves* test “easily translate[s] to an evaluation of prosecutorial error”). “In closing arguments, counsel is allowed some latitude. Counsel may draw conclusions and argue permissible inferences which reasonably flow from the evidence presented.” *State v. Thornton*, 498 N.W.2d 670, 676 (Iowa 1993) (citing *State v. Phillips*, 226 N.W.2d 16, 19 (Iowa 1975)). But counsel cannot “create evidence or misstate the facts.” *Id.* (citing *Phillips*, 226 N.W.2d at 19).

Assuming without deciding the prosecutor’s comment was improper, we conclude Lopez suffered no prejudice. See *Graves*, 668 N.W.2d at 869 (“It is the prejudice resulting from the misconduct, not the misconduct itself, that entitles a defendant to a new trial.” (quoting *State v. Piper*, 663 N.W.2d 931, 894 (Iowa 2003), *overruled on other grounds by State v. Hanes*, 790 N.W.2d 545 (Iowa 2010))). In determining whether a party was prejudiced by prosecutorial misconduct or error, we consider

- (1) the severity and pervasiveness of the misconduct;
- (2) the significance of the misconduct to the central issues in the case;
- (3) the strength of the State’s evidence;
- (4) the use of cautionary

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<sup>17</sup> The State argues Lopez failed to preserve error on this issue because defense counsel did not request a mistrial. We disagree with the State’s error-preservation argument—defense counsel’s objection was sufficient to preserve Lopez’s claim. See *Neiderbach*, 837 N.W.2d at 209 (distinguishing need to move for mistrial to preserve error on prosecutorial misconduct claim where the objection is sustained as laid out in *Krogmann*, 804 N.W.2d at 526, with district court overruling objection, where objection is sufficient to preserve error, explaining “[a] motion for mistrial would be futile when the district court has overruled the objection to the statements giving rise to the grounds for a mistrial.”).

instructions or other curative measures; and (5) the extent to which the defense invited the misconduct.

*Id.* at 877; *see also Schlitter*, 881 N.W.2d at 394. We can envision a case where prejudice could result from an isolated incident of prosecutorial error. But that case is far from the norm. Ordinarily, courts will find prejudice only where the prosecutor has persistently injected harmful information into the jury trial. *See Neiderbach*, 837 N.W.2d at 210.

Like in *Neiderbach*, the prosecutor here made a single statement, arguably mischaracterizing the expert testimony. *See id.* The prosecutor made the statement against a backdrop of extensive expert testimony on the perceived unlikelihood of R.A. incurring her constellation of injuries in a manner consistent with Lopez's explanation. The State presented strong evidence R.A.'s injuries—fatal and otherwise—did not result from an accidental fall from her high chair. We affirm the district court's ruling on the grounds Lopez failed to demonstrate prejudice from the alleged error. *See id.* (“[The appellant] cited no case on point holding a new trial was required because the prosecutor misstated an expert's testimony.”).

Our finding of harmless error finds support in defense counsel's handling of the objection at trial. Counsel asked the court to admonish the jurors to disregard the lottery statement, but did not believe the error was serious enough to prompt a mistrial. If the prosecutor's mistake did not merit a mistrial at that time, when the verdict had yet to be delivered, it does not mandate a new trial now.

Finding sufficient evidence, no abuse of discretion in the evidentiary rulings, and no breach of duty by counsel, we affirm. We preserve Lopez's ineffective-

assistance claim relating to prior-bad-acts evidence for postconviction proceedings.

**AFFIRMED.**