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## DISTRICT OF COLUMBIA COURT OF APPEALS

No. 11-CV-0445

WILSON SPORTING GOODS COMPANY, APPELLANT,

V.

EDWIN W. HICKOX

and

LISA A. HICKOX, APPELLEES.

Appeal from the Superior Court of the District of Columbia (CAB-1489-08)

(Hon. John Ramsey Johnson, Trial Judge)

(Argued October 23, 2012

Decided January 31, 2013)

Andrew Butz, with whom Keith M. Bonner, Nimi Amirthalingam, and Timothy E. Fizer were on the brief, for appellant.

Patrick M. Regan, with whom Paul J. Cornoni was on the brief, for appellee.

Before FISHER, OBERLY, and McLEESE, Associate Judges.

MCLEESE, Associate Judge: Baseball umpire Edwin Hickox was injured while wearing a mask manufactured by Wilson Sporting Goods Company. Mr. Hickox and his wife brought products-liability claims against Wilson. A jury

found for the Hickoxes on all claims. Wilson appeals, arguing that the Hickoxes presented expert testimony that lacked an adequate foundation; that Wilson was entitled to a jury instruction on assumption of risk; and that the evidence was insufficient to support the verdict. We affirm.

I.

The Hickoxes' evidence at trial indicated the following. In 2005, at an annual retreat for Major League Baseball umpires, a Wilson representative gave Mr. Hickox an umpire's mask with what the representative claimed was a new, safer design. Several months later, Mr. Hickox wore the mask while working behind home plate as an umpire during a game in Washington, D.C. In the top of the ninth inning, a foul-tipped ball struck the mask. The impact of the ball gave Mr. Hickox a concussion and damaged a joint between the bones in Mr. Hickox's inner ear. As a result, Mr. Hickox suffered permanent hearing loss of mild to moderate severity.

The mask was a traditional umpire's mask, but had a newly designed throat guard that angled forward instead of extending straight down. According to the Hickoxes, the throat guard should have had a center wire and should have extended

straight down with no forward angle. Because the mask lacked these features, when the ball hit the throat guard, the mask did not deflect the ball but rather temporarily trapped the ball, concentrating the ball's energy at the point of impact. As a result, the mask was driven into Mr. Hickox's jaw with great force.

Safer, alternative masks were sold at the time of the incident. If Mr. Hickox had been wearing either a hockey-style mask or a traditional mask with a throat guard that extended straight down, he probably would not have suffered the injury.

Mr. Hickox believed that Wilson tested new products and ensured that they were safe before selling them. In fact, Wilson did not test the type of mask worn by Mr. Hickox to determine the forces that would be transferred to the wearer's head upon impact. Such testing would have shown the mask to be defective, because the mask can trap balls rather than deflect them.

Mr. Hickox anticipated that the mask would disperse the force created when a ball hit the mask. That is what the product-design engineers at Wilson intended the mask to do and what Wilson's representative told Mr. Hickox the mask would do. When Mr. Hickox was injured, the mask failed to serve this purpose, because of the mask's defective design.

In contrast to the Hickoxes' version of events, Wilson contended the following at trial. The ball hit the mask above the throat guard, not on it, and so the same injury would have occurred even if the mask had not had a throat guard at all. Wilson intended the mask to provide protection by deflecting balls away from the wearer's head, and the mask accomplished this objective during the incident. At the time of the incident, there were no design or testing standards for wire baseball masks. The mask was designed using feedback from baseball players and umpires, and the forward angle improved the mask's utility by preventing the throat guard from hitting against the umpire's chest protector and dislodging or being knocked out of alignment.

Other companies sold masks with forward-angled throat guards, and those masks were not associated with injuries like Mr. Hickox's. The mask had been field-tested for over five years, and had been lab-tested before the incident. Before the incident, Mr. Hickox had used the mask many times without injury. After the incident, Mr. Hickox suffered additional head injuries while umpiring, even though he was then wearing the hockey-style mask that he claimed to be a safer, alternative design.<sup>1</sup>

After oral argument before this court, Wilson filed a motion to supplement the record with materials relating to a suit the Hickoxes filed in connection with (continued . . .)

Mr. Hickox was an experienced umpire who knew that participating in sports creates the risk of injury, that no face mask can guarantee safety, and that injury is more likely without protective equipment.

At the close of trial, the judge submitted several tort claims to the jury: strict liability for a defective product, design defect, negligent design, design defect due to failure to warn, and breach of implied warranty of fitness for a particular purpose. The jury rendered verdict for the Hickoxes on each of their claims, awarding \$750,000 to Mr. Hickox and \$25,000 to his wife.

II.

A.

Wilson asserts that the testimony of the Hickoxes' expert witness, Dr. Igor

<sup>(...</sup> continued)

the subsequent incident in which Mr. Hickox was injured. We deny Wilson's motion. The information Wilson asks us to consider was not considered by the trial judge or jury. Barring unusual circumstances not present here, this court does not consider new materials on appeal. *See Moorehead v. District of Columbia*, 747 A.2d 138, 145 n.12 (D.C. 2000).

Paul, was not based on adequate data and lacked a scientific foundation. *See generally Sponaugle v. Pre-Term, Inc.*, 411 A.2d 366, 367 (D.C. 1980) (expert opinion must be based on fact or adequate data and may not be mere conjecture). More specifically, Wilson objects that Dr. Paul did not make measurements or perform testing on any mask, did not refer to design or testing standards for traditional-style masks, and did not sufficiently explain his analytical methods or how he reached his conclusions. Rejecting similar contentions, the trial court described Dr. Paul's testimony as "appropriate and well-founded." We review such determinations for an abuse of discretion. *Jones v. United States*, 990 A.2d 970, 977 (D.C. 2010). We conclude that the trial court acted reasonably in finding that Dr. Paul's testimony had an adequate factual basis.

At trial, Dr. Paul based his testimony on the following sources of information: freeze-frame and slow-motion analysis of the videotape of the incident; calculation of the energy possessed by a baseball when pitched at various speeds; published results of impact testing conducted on hockey-style helmets by an association that sets standards for sports helmets; and examination of the Wilson mask and other baseball masks.<sup>2</sup>

Wilson suggests that it was not possible for Dr. Paul to see where the ball hit the mask in the video. Wilson does not appear to have objected to the video (continued . . .)

Appellate courts have consistently upheld the admission by trial courts of comparable expert testimony. *See, e.g., Orth v. Emerson Elec. Co., White-Rodgers Div.*, 980 F.2d 632, 636-37 (10th Cir. 1992) (trial court did not abuse discretion in products-liability case by admitting expert witness's testimony that debris inside furnace safety valve caused accident; although expert did not dismantle safety valve to examine it, and expert's theory depended on multiple assumptions, expert's chain of reasoning was logical and opinion was based on undisputed fact that safety valve was in open position after accident but should have been in closed position); *Mathes v. Sher Express, L.L.C.*, 200 S.W.3d 97, 110-11 (Mo. Ct. App. 2006) (trial court did not abuse discretion in products-liability case by admitting expert testimony that truck had defective fuel-system design; although expert did

(... continued)

analysis on that basis at trial. Moreover, Wilson's expert used the video in a similar manner at trial, testifying that in his opinion the video showed that the ball did not hit Mr. Hickox's throat guard. It is unclear whether Wilson now intends to suggest that Dr. Paul's testimony about the video should have been excluded, but in any event we would not be persuaded by such an argument. Even if Wilson had objected at trial, it would not have been an abuse of discretion for the trial court to permit each witness to testify to his conclusions about what the video depicted, leaving it to the jury to assess that conflicting testimony. *Cf.*, *e.g.*, *Crymes v. State*, 630 So. 2d 120, 123 (Ala. Crim. App. 1993) ("the 'blurry' nature of the photograph was a matter concerning the weight, rather than admissibility, of the photograph").

<sup>&</sup>lt;sup>3</sup> Although federal law governing the admission of expert testimony differs from the law in this jurisdiction in some respects, we view federal cases as persuasive authority in the current context. *See, e.g., Jones*, 990 A.2d at 980 n.30 (citing federal cases in determining admissibility of expert testimony).

not personally conduct certain tests, expert had background in engineering and truck design, had reviewed photos of accident site, undamaged truck, and other studies and information, and testified about alternative, safer design).

Wilson asserts that Dr. Paul's testimony was deficient in several respects, but we conclude that the asserted deficiencies go to weight rather than admissibility. *See generally, e.g., Benn v. United States*, 978 A.2d 1257, 1275 (D.C. 2009) ("[V]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.") (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993)).

1.

Wilson faults Dr. Paul for failing to conduct his own tests, but there is no requirement that an expert perform tests, particularly where the expert relies on published data generated by another expert in the pertinent field. *See Gussack Realty Co. v. Xerox Corp.*, 224 F.3d 85, 94-95 (2d Cir. 2000) ("expert need not have conducted her own tests"); *Werth v. Makita Elec. Works*, 950 F.2d 643, 649-51 (10th Cir. 1991) (trial court abused discretion by excluding expert testimony as

speculative because expert did not conduct independent tests; there is no requirement of independent testing, and failure to conduct tests goes to weight). As noted above, Dr. Paul's testimony relied in part on the published results of tests conducted by an industry association.<sup>4</sup>

Wilson relies on several cases in which an appellate court affirmed a trial court's exclusion of expert testimony in part because the expert had not done testing, but those cases are readily distinguishable. As a threshold matter, there is a critical difference between holding that a trial court did not abuse its discretion by excluding expert testimony, which is what was held in the cases cited by Wilson, and holding that a trial court abused its discretion by admitting expert testimony, which is what Wilson would have this court hold. *Cf. McDaniel v. United States*, 343 F.2d 785, 788 (5th Cir. 1965) (observing that "a case affirming an exclusion [of evidence] is not necessarily authority to reverse for an admission," because trial

Wilson asserts in passing that Dr. Paul's testimony was inadmissible because Dr. Paul was not offered and qualified as an expert in testing. Wilson fails to brief that issue, however, and the issue therefore is not properly before this court. *See Bardoff v. United States*, 628 A.2d 86, 90 n.8 (D.C. 1993) (issues raised in brief but not supported by argument are considered abandoned); D.C. App. R. 28 (a)(8)(A). Wilson also does not appear to have raised such an objection in the trial court. In any event, such an argument would be unavailing. The trial court did not abuse its discretion by permitting Dr. Paul to testify, in the area of his subject-matter expertise, about the general importance of testing and to describe the results of tests conducted by other experts, without requiring that Dr. Paul be separately offered and qualified as an expert in testing.

judge has discretion to admit or exclude evidence); State v. McMinn, 690 A.2d 1017, 1022 (N.H. 1997) (affirming trial court's denial of mistrial and distinguishing cases where appellate court affirmed grant of mistrial, noting that "[a] trial court's discretion is not abused simply because a different court might have reached a permissible contrary conclusion"). In any event, the expert testimony at issue in the cases relied upon by Wilson either was substantially more problematic than Dr. Paul's testimony in the present case or involved testimony about proposed alternative product designs that were not commercially available and had not been tested. See, e.g., Testerman v. Riddell, Inc., 161 Fed. Appx. 286, 289-90 (4th Cir. 2006) (per curiam) (trial court did not abuse discretion by excluding expert testimony, where expert claimed that improperly fitted shoulder pads caused football player's injury, but expert was unable to say which blow caused injury or whether blow was to area that would have been exposed even if shoulder pads fit correctly); Mohney v. USA Hockey, Inc., 138 Fed. Appx. 804, 808-10 (6th Cir. 2005) (trial court did not abuse discretion by excluding experts' testimony, where cause of accident was uncertain, experts did not perform testing or cite to any published work, one expert's opinion contradicted prevailing scientific view, and other expert made unsupported assumptions).

2.

Wilson also faults Dr. Paul for failing to provide an adequate explanation of his reasoning. Wilson is correct that courts should exclude expert testimony that consists of mere assertions. *See, e.g., Viterbo v. Dow Chem. Co.*, 826 F.2d 420, 424 (5th Cir. 1987) ("Without more than credentials and a subjective opinion, an expert's testimony that 'it is so' is not admissible."). But Dr. Paul did not merely assert that the angle of the throat guard was a defect that caused Mr. Hickox's injuries; rather, Dr. Paul explained his reasoning, step by step. Using freeze frames of the video of the incident, Dr. Paul stated his opinion that the angle of the throat guard caused the mask to trap the ball before deflecting it, concentrating the energy of the ball at the point of impact. Dr. Paul further explained how the impact of the ball hitting the throat guard created a wedging action that pushed the wire portion of the mask against Mr. Hickox's jaw bone, causing injury.

It is true, as Wilson emphasizes, that Dr. Paul did not fully explain every aspect of his reasoning. In expert testimony, however, as "[i]n administrative proceedings . . . [and] ordinary life, 'explanations come to an end somewhere.'" *Liskowitz v. Astrue*, 559 F.3d 736, 743 (7th Cir. 2009) (quoting Ludwig Wittgenstein, *Philosophical Investigations* § 1 (G.E.M. Anscombe trans. 1968)).

Any remaining gaps in Dr. Paul's explanation of his reasoning did not require exclusion of Dr. Paul's testimony but rather were the proper subject of cross-examination and closing argument. *Cf.*, *e.g.*, *SR Int'l Bus. Ins. Co. v. World Trade Ctr. Props.*, *LLC*, 467 F.3d 107, 134 (2d Cir. 2006) (gaps or inconsistencies in expert's testimony went to weight, not admissibility).

**3.** 

We are unconvinced by Wilson's other challenges to the admissibility of Dr. Paul's testimony. Wilson relies on several cases discussing the admissibility of expert testimony where the expert employs a particular theory or technique that is not accepted in the scientific community. Because Wilson does not allege that Dr. Paul's testimony had this flaw, those cases are inapposite. Similarly unhelpful to Wilson are this court's cases holding that an expert testifying to the standard of care in a negligence case could not testify solely to a personal opinion about what should have been done, but rather also had to demonstrate knowledge of the applicable national standard of care and testify as to whether that standard was met. Some of Dr. Paul's testimony related to standard of care, and it may well be true that Dr. Paul's testimony was not sufficient to establish a national standard of care. Wilson, however, was found liable on strict-liability theories that do not

require proof of a national standard of care, and Dr. Paul's testimony was admissible on issues pertinent to those theories.

Wilson does cite one products-liability case holding that a trial court abused its discretion by admitting expert testimony, but in that case the complete lack of evidence about consumer expectations rendered the expert's testimony insufficient to establish a design defect. *See Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 337 (4th Cir. 1991) (trial court abused discretion by admitting expert testimony about feasibility of manufacturing helmet that protected against low-impact accidents, because plaintiff provided no evidence that consumers or manufacturers at time helmet was sold thought it was important for helmets to protect against low-impact accidents). As we explain *infra*, there was no such failure of proof in the present case.

In sum, the trial court did not abuse its discretion by admitting Dr. Paul's testimony.

В.

Wilson asserts that it was entitled to have the jury instructed on an

assumption-of-risk defense. We view the record in the light most favorable to Wilson and inquire whether an assumption-of-risk defense had sufficient evidentiary support. *Haidak v. Corso*, 841 A.2d 316, 320 (D.C. 2004). We find no error in the trial court's determination that such support was lacking.

An assumption-of-risk instruction is warranted in a design-defect case if the defendant offers evidence that the plaintiff knew about the specific alleged defect and the associated danger. See Warner Fruehauf Trailer Co. v. Boston, 654 A.2d 1272, 1275 (D.C. 1995) (finding insufficient evidence to support assumption-ofrisk defense, where plaintiff alleged design defect in truck lift-gate; although plaintiff had extensive training and work experience with lift-gates, and understood general dangers of working behind lift-gates, defendant failed to present sufficient evidence that plaintiff was aware of specific defect and danger created by defect). Simply showing that Mr. Hickox knew the general risks of baseball umpiring was inadequate. Wilson needed evidence that Mr. Hickox knew that the throat guard's acute, forward angle had a tendency to concentrate energy and increase the risk of injury. Because Wilson failed to present such evidence, the trial court did not err by declining to give an assumption-of-risk instruction.

Wilson argues that there was insufficient evidence to support judgment against it on any of the products-liability claims. We view the evidence in the light most favorable to the Hickoxes and will reverse only if no reasonable person could have rendered a verdict in the Hickoxes' favor. *Oxendine v. Merrell Dow Pharm., Inc.*, 506 A.2d 1100, 1103 (D.C. 1986). A motion for judgment notwithstanding the verdict should be granted only in extreme cases. *Id.* As Wilson acknowledges, a finding that the evidence was sufficient on any one of the claims found by the jury will support the judgment in this case in its entirety. *Cf., e.g., National R.R. Passenger Corp. v. McDavitt*, 804 A.2d 275, 284 (D.C. 2002) (in absence of special-verdict form, general verdict of liability will be upheld as long as evidence supported at least one theory of liability). Because we find sufficient evidence to support the design-defect claim, we address only that claim.

There are two tests commonly used to determine whether a product's design was defective: the consumer-expectation test and the risk-utility test. *Warner Fruehauf*, 654 A.2d at 1276 & n.9. In challenging the sufficiency of the evidence to support the jury's finding of a design defect, Wilson appears to analyze the evidence under the risk-utility test. In the circumstances of this case, however, we

conclude that the evidence should properly be analyzed under the consumerexpectation test.

Wilson explicitly assented at trial to jury instructions that required the jury to make findings under a consumer-expectation test. Specifically, the jury was told that "[a] design is defective if the product fails to perform as safely as an ordinary customer would expect when [the product is] used in an intended or reasonably foreseeable manner." This formulation is essentially equivalent to the consumer-expectation test as defined by this court and others. *See Warner Fruehauf*, 654 A.2d at 1276 & n.9 ("[A] product is unreasonably dangerous when it fails to perform in the manner reasonably to be expected by the ordinary consumer."); *see also, e.g., Caterpillar Tractor Co. v. Beck*, 593 P.2d 871, 884 (Alaska 1979) (design defect if product "failed to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner") (internal quotation marks omitted).<sup>5</sup>

The trial court and the parties derived this jury instruction from Standardized Civil Jury Instructions for the District of Columbia, No. 23.09, at 23-9 (2012 rev. ed.). The comment to that instruction indicates that either the consumer-expectation test or the risk-utility test may apply in this jurisdiction, "depending on the factual situation." *Id.* at 23-10 (citing *Warner Fruehauf*, 654 A.2d at 1276 n.9). In *Warner Fruehauf*, this court applied the risk-utility test, finding that test appropriate for the type of product at issue in that case, a truck liftgate. 654 A.2d at 1276 n.9. Although *Warner Freuhauf* raises the possibility that (continued . . .)

In the absence of manifest injustice, where an appealing party requested or acquiesced in a jury instruction specifying the elements of a cause of action, we have assessed the sufficiency of the evidence in light of the elements that were instructed to the jury, rather than in light of elements asserted by the appealing party for the first time on appeal. *See District of Columbia v. Banks*, 646 A.2d 972, 974-79 (D.C. 1994). Accordingly, we employ the consumer-expectation test to evaluate the sufficiency of the evidence in this case. Under that test, a product has a design defect if it "fails to perform in the manner reasonably to be expected by the ordinary consumer." *See Warner Fruehauf*, 654 A.2d at 1276 n.9. A reasonable juror could have found that test to have been met in this case.

Viewed in the light most favorable to the Hickoxes, the evidence indicated that the mask at issue was more dangerous than comparable masks sold at the time, such as hockey-style masks, because the mask could concentrate energy at the

<sup>(...</sup> continued)

the consumer-expectation test might apply in other circumstances, *id.*, this court has not applied the consumer-expectation test in any case. It therefore is an open question whether the consumer-expectation test is applicable in the District of Columbia. Whatever the answer to that question may be, Wilson did not object in the trial court to the consumer-expectation instruction, and does not appear to argue on appeal that giving the instruction was legal error. We therefore do not resolve that question. We also note that -- without objection from Wilson -- the trial court instructed the jury as to factors that relate to the risk-utility test rather than the consumer-expectation test. Here too, Wilson does not appear to raise a claim of legal error on appeal, and we therefore do not address the question.

point of impact, rather than distribute energy evenly throughout the padded area of the mask. Because the energy possessed by a pitched baseball is adequate to cause severe injury, the jury could reasonably have concluded that a mask that concentrated energy would increase the risk of severe injury.

The jury could also have relied on the existence of safer, commercially available alternatives to draw inferences about the level of safety an ordinary user would expect. *See Whitted v. General Motors Corp.*, 58 F.3d 1200, 1206 (7th Cir. 1995) (treating evidence of feasible, safer alternative as relevant under consumer-expectation test); *Siruta v. Hesston Corp.*, 659 P.2d 799, 808-09 (Kan. 1983) (same).<sup>6</sup> There was evidence that alternative masks with detachable throat guards and no forward angle work well and do not excessively restrict the umpire's movement. There also was evidence that Mr. Hickox would not have suffered injury to his ear had he been wearing a hockey-style mask or a mask with a center

<sup>&</sup>lt;sup>6</sup> States that apply the consumer-expectation test do so in varying ways and circumstances, and some courts apply variants that include elements of both a consumer-expectation test and a risk-utility test. *See generally Restatement (Third) of Torts: Prods. Liab.* § 2, at 65-77, Part II(B)-(D) of Reporters' Note to cmt. d (1998). We find the out-of-jurisdiction cases cited in this opinion instructive for current purposes, despite the differences in approach among the various jurisdictions.

wire and no forward angle.<sup>7</sup>

In addition, the jury could have concluded that the statements made by Wilson's representative to Mr. Hickox about the mask reflected Wilson's standard marketing approach, and that an ordinary consumer therefore would have expected the mask to perform more safely than other models. *See Mikolajczyk v. Ford Motor Co.*, 901 N.E.2d 329, 352 (Ill. 2008) (finding advertising content relevant to assess consumer expectations); *Leichtamer v. American Motors Corp.*, 424 N.E.2d 568, 578 (Ohio 1981) ("The commercial advertising of a product will be the guiding force upon the expectations of consumers with regard to the safety of a

<sup>&</sup>lt;sup>7</sup> Wilson emphasizes that Mr. Hickox suffered injury in a second incident while wearing the same type of mask that the Hickoxes claimed to be a safer, alternative design. A single instance of failure, however, does not mean that the design of the second mask was not a safer alternative. To establish that the mask Mr. Hickox wore during the second incident was not a safer, alternative design, Wilson would have needed to present additional evidence, such as evidence that the first mask would not have failed in the second incident; that the second mask failed due to an aspect of its design rather than a manufacturing defect; or that there is a design trade-off such that avoiding the asserted design flaw of the first mask would require introducing the feature that caused the second mask to fail. Cf., e.g., Back v. Wickes Corp., 378 N.E.2d 964, 970 (Mass. 1978) (listing factors relevant to determining whether alternative design is safer, including whether "adverse consequences to the product and to the consumer . . . would result from an alternative design") (internal quotation marks omitted); cf. generally Restatement (Third) of Torts: Prods. Liab. § 2, cmt. f (1998) (whether alternative design is safer may depend in part on whether "alternative design would reduce the efficiency and the utility of the product").

product, and is highly relevant to a formulation of what those expectations might be."); McCathern v. Toyota Motor Corp., 23 P.3d 320, 330-32 (Or. 2001) (consumer expectations can be established by manufacturer's representations about product, although such evidence will rarely by itself be sufficient). There was evidence that Wilson's representative told Mr. Hickox that the mask would disperse energy and protect against concussion, and that the mask was the best and safest technology. Mr. Hickox also testified that he believed that companies like Wilson tested new products and did not sell them unless they were safe to use. Jurors could consider such testimony in combination with their own reasonable inferences to determine an ordinary consumer's expectations. See Saller v. Crown Cork & Seal Co., 115 Cal. Rptr. 3d 151, 164-65 (Ct. App. 2010) (finding sufficient evidence of consumer expectations where plaintiff testified that he expected asbestos insulation to be safe based on his systemic exposure to it at work; noting that "testimony of a single witness [can be] sufficient" to establish safety expectations of ordinary user); Slepski v. Williams Ford, Inc., 364 A.2d 175, 178 (Conn. 1975) ("[T]he jury can draw its own reasonable conclusions as to the expectations of the ordinary consumer and the knowledge common in the community at large."); Mikolajczyk, 901 N.E.2d at 352 ("[M]embers of the jury may rely on their own experiences to determine what an ordinary consumer would expect.").

Evidence of industry practice can also be relevant to reasonable consumer expectations. See Alevromagiros v. Hechinger Co., 993 F.2d 417, 420-21 (4th Cir. 1993) (consumer expectations can be established through evidence of industry practices); Robinson v. Audi Nsu Auto Union Aktiengesellschaft, 739 F.2d 1481, 1486 (10th Cir. 1984) (same); Falk v. Keene Corp., 782 P.2d 974, 979-80 (Wash. 1989) (evidence of industry custom is admissible and relevant to consumer expectations). Wilson's objective in designing the mask was to disperse energy, not to concentrate it. At the time of the incident, Wilson tested its hockey-style masks to determine if they met impact-intensity standards, but did not perform such testing on its baseball masks. At a time when Wilson used energy dispersal as a design objective for its baseball masks and when impact-intensity standards existed for football helmets, a reasonable juror could infer that an ordinary consumer would have expected baseball masks to disperse rather than concentrate energy. In sum, considering all the evidence, a reasonable juror could conclude that an ordinary consumer would have expected the mask to perform more safely than it did.

Finally, liability for design defect requires proof that the defect proximately caused the plaintiff's injury. *Warner Fruehauf*, 654 A.2d at 1274. Wilson argues that the Hickoxes failed to present sufficient causation evidence, because they did

not show that additional product testing by Wilson would have uncovered the design defect. We are doubtful that such proof was required, because proof that a product was designed defectively under the consumer-expectations test does not appear to require proof that the defect was reasonably foreseeable, whether through testing or otherwise. See Caterpillar Tractor, 593 P.2d at 885 ("[T]he plaintiff need only show, for strict liability to apply, that he used the product in an intended or reasonably foreseeable fashion and the product failed to perform in that capacity as safely as expected."); Ontai v. Straub Clinic & Hosp., Inc., 659 P.2d 734, 739 (Haw. 1983) ("It is enough that the plaintiff demonstrates that because of its manufacture or design, the product does not meet the reasonable expectations of the ordinary consumer or user as to its safety."). In any event, there was sufficient evidence that testing would have revealed the defect, because Dr. Paul testified that Wilson would have discovered the defect if it had conducted testing to measure the force exerted by the mask on the wearer's head after impact by a baseball. Combined with Dr. Paul's testimony that Mr. Hickox would not have suffered the same injury if he had worn an alternative mask, this evidence was sufficient to establish proximate causation.

The judgment of the trial court is therefore

Affirmed.