[Cite as Schwartz v. Honeywell Internatl., Inc., 2016-Ohio-3175.]

# Court of Appeals of Ohio

EIGHTH APPELLATE DISTRICT COUNTY OF CUYAHOGA

JOURNAL ENTRY AND OPINION No. 103377

# MARK SCHWARTZ, INDIVIDUALLY AND AS EXECUTOR OF THE ESTATE OF KATHLEEN SCHWARTZ, ET AL.

PLAINTIFFS-APPELLEES CROSS-APPELLANTS

vs.

# HONEYWELL INTERNATIONAL, INC., ET AL.

DEFENDANTS-APPELLANTS CROSS-APPELLEES

# JUDGMENT: AFFIRMED IN PART, REVERSED IN PART, REMANDED

Civil Appeal from the Cuyahoga County Court of Common Pleas Case No. CV-14-819582

**BEFORE:** S. Gallagher, J., Keough, P.J., and Celebrezze, J.

**RELEASED AND JOURNALIZED:** May 26, 2016

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# SEAN C. GALLAGHER, J.:

**{¶1}** Defendant-appellant Honeywell International, Inc. ("Honeywell"), appeals the judgment entered upon a jury verdict that found Honeywell was 5 percent responsible

for the injuries of decedent Kathleen Schwartz ("Schwartz"), who died from peritoneal mesothelioma. The amount of the judgment against Honeywell was \$1,011,639.92. Plaintiffs-appellees<sup>1</sup> have filed a cross-appeal challenging the trial court's decision to grant a directed verdict against them on their claim for punitive damages. Upon review, we affirm the judgment in plaintiffs' favor, reverse the decision on punitive damages, and remand the cause for a new trial on the punitive damages claim.

#### Lawsuit Against Honeywell

{**Q2**} Plaintiffs brought this action against Honeywell and several other defendants. The case proceeded to trial against only Honeywell.<sup>2</sup> Honeywell is the successor-in-interest to The Bendix Corporation ("Bendix"). Plaintiffs claimed that Schwartz developed peritoneal mesothelioma and died as a result of her exposures to asbestos and asbestos-containing products by virtue of her father's automotive repair work in the garage of the family home, involving brakes manufactured by Bendix, and her father's employment as an electrician.

**{¶3}** Prior to trial, Honeywell filed several motions in limine, three of which are relevant to this appeal. First, Honeywell filed a motion in limine to exclude the testimony of Joseph H. Guth, Ph.D., which requested a *Daubert* hearing. The trial court conducted a *Daubert* hearing on this motion. Second, Honeywell filed a motion in

<sup>&</sup>lt;sup>1</sup> Mark Schwartz brought this action individually and as executor of the estate of Kathleen Schwartz, and as legal guardian of his minor children. Taylor Schwartz, an emancipated child of Mark and Kathleen Schwartz, is also a plaintiff in the action.

 $<sup>^{2}</sup>$  By the time of trial, Honeywell was the sole remaining defendant.

limine to preclude the opinions of plaintiffs' experts suggesting that brake dust causes peritoneal mesothelioma or that "every exposure" to asbestos is a substantial contributing cause of the disease. The trial court heard arguments on this motion before the commencement of trial. Third, Honeywell filed a motion in limine to exclude any testimony concerning an amicus brief that was initially filed with the Michigan Supreme Court and was later published as a medical article. Each of these motions was denied by the trial court.

{**¶4**} During trial, the court denied Honeywell's motion for a directed verdict, which was made at the conclusion of plaintiffs' case-in-chief and again at the conclusion of the evidence. Honeywell moved for a directed verdict on the ground that plaintiffs failed to prove general or specific causation, and on the separate ground that plaintiffs failed to establish a claim for design defect.

{**¶5**} After the compensatory phase of the bifurcated trial concluded, the trial court granted a directed verdict on plaintiffs' claim for punitive damages.

 $\{\P6\}$  The jury rendered a verdict for plaintiffs in the total amount of \$20,232,798.21, and found Honeywell was 5 percent responsible for Schwartz's injuries. The court rendered judgment for plaintiffs and against Honeywell in the amount of \$1,011,639.92.

#### **Background Facts**

{**¶7**} Schwartz's father, Arthur Webber, was employed as an electrician for the Pennwalt Corporation from 1963 until 1996. He claimed that throughout his

employment, he was occupationally exposed to asbestos and asbestos-containing products. At the end of a work day, he would brush off his clothes. After leaving work he would pick up his daughter in the family car and take her home.

**{¶8}** From 1964 until 1986, Webber performed a number of brake jobs on family vehicles in the garage attached to the family home. Webber testified he always used Bendix replacement brakes. He described the process of changing the brakes. He would use a hammer to loosen the drum to get it off, which "created a lot of brake dust." He would clean off the brake using a whisk broom and wipe it down with a rag, which created brake dust. Before installing a new brake, he would "take the sandpaper and rough it up a little bit[,]" which created dust. When changing brakes, the brake dust would get on him and around him. Once finished, he cleaned up with a dust bin that he emptied in the trash can.

**{¶9**} Although he could not provide a number, he testified that he performed at least two brake jobs on each car he owned, and he referenced five different vehicles in his testimony. At one point he testified the number of brake jobs was "at least five," but he also indicated it could have been "six, seven, eight, nine." Webber also testified that he removed the wheels and drums on his cars "every summer" to check the condition of the brakes. Again, he would use a hammer to loosen the brakes and would use a broom to whisk away any dust that accumulated and would wipe it down.

{**¶10**} Webber's children would access the yard through the garage. After performing brake work, Webber typically would remain in the same clothing, while

interacting with his family, until the end of the day. His clothing was mixed and laundered with the clothing of other family members. Once old enough, Schwartz helped with the family laundry.

{**¶11**} Schwartz resided in the family home for approximately 18 years, from her birth in 1968 until she went to college in 1986. She was 43 years old when she died of peritoneal mesothelioma in 2012, and is survived by a husband and four children.

#### **Appeal and Cross-appeal Challenges**

{**¶12**} On appeal, Honeywell challenges the trial court's denial of the three motions in limine and the court's denial of its motion for a directed verdict. In the cross-appeal, plaintiffs challenge the trial court's decision to grant a directed verdict on their claim for punitive damages.

#### **Admission of Expert Testimony**

{**¶13**} Honeywell's first and second assignments of error challenge the trial court's admission of expert testimony, specifically that of Dr. Carlos Bedrossian and Dr. Guth, who offered opinions at trial.

{¶14} A trial court has broad discretion in determining the admissibility of expert testimony, subject to review for an abuse of discretion. *Terry v. Caputo*, 115 Ohio St.3d 351, 2007-Ohio-5023, 875 N.E.2d 72, ¶ 16. Generally, a trial court should admit expert testimony when it is material and relevant, and in accordance with Evid.R. 702. *Id.* Evid.R. 702 permits a witness to testify as an expert when the following circumstances apply:

(A) The witness' testimony either relates to matters beyond the knowledge or experience possessed by lay persons or dispels a misconception common among lay persons;

(B) The witness is qualified as an expert by specialized knowledge, skill, experience, training, or education regarding the subject matter of the testimony;

(C) The witness' testimony is based on reliable scientific, technical, or other specialized information. To the extent that the testimony reports the result of a procedure, test, or experiment, the testimony is reliable only if all of the following apply:

(1) The theory upon which the procedure, test, or experiment is based is objectively verifiable or is validly derived from widely accepted knowledge, facts, or principles;

(2) The design of the procedure, test, or experiment reliably implements the theory;

(3) The particular procedure, test, or experiment was conducted in a way

that will yield an accurate result.

Evid.R. 702.

{¶15} In determining whether an expert's testimony is admissible under Evid.R. 702, the trial court is to focus on whether the opinion is based on scientifically valid principles, as opposed to whether the conclusions are correct or satisfy the proponent's burden of proof at trial. *Miller v. Bike Athletic Co.*, 80 Ohio St.3d 607, 613-614, 1998-Ohio-178, 687 N.E.2d 735. The trial court, as gatekeeper, must evaluate the principles and methodology that underlie an expert's opinion. *Valentine v. Conrad*, 110 Ohio St.3d 42, 2006-Ohio-3561, 850 N.E.2d 683, ¶ 17, citing *Daubert v. Merrell Dow* 

*Pharmaceuticals, Inc.*, 509 U.S. 579, 589, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), and *GE v. Joiner*, 522 U.S. 136, 142, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997).

**{[16}** Several factors may aid the court in evaluating the reliability of scientific evidence, including: "(1) whether the theory or technique has been tested, (2) whether it has been subjected to peer review, (3) whether there is a known or potential rate of error, and (4) whether the methodology has gained general acceptance." *Miller* at 611, citing Daubert at 593-594. The factors are not to be rigidly applied because the inquiry is a flexible one. Daubert at 594; Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999). "[E]ven if [an expert's] opinion has neither gained general acceptance by the scientific community nor has been the subject of peer review, these are not prerequisites to admissibility under Daubert[.]" Miller at 613. The "ultimate touchstone" for determining reliability is helpfulness to the trier of fact, which turns on whether the expert's technique or principle is sufficiently reliable so that it will aid the trier of fact in reaching accurate results. Id. at 614 (citations omitted). "Vigorous 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." Daubert at 596.

#### **Dr. Bedrossian**

**{¶17}** Under its first assignment of error, Honeywell claims as follows: The trial court committed reversible error by permitting plaintiff's experts to testify, over objections, that (1) an individual's "total and cumulative exposure to asbestos, from any and all products, containing any and all fiber types" is a significant contributing factor to the development of mesothelioma; (2) evidence of any asbestos exposure from a product (regardless of fiber type or dose) establishes, unless proven otherwise, that the product caused an individual's mesothelioma; and (3) brake dust caused decedent's peritoneal mesothelioma: these opinions are based on an untested hypothesis that lacks any indicia of reliability and, therefore, should not have been admitted.

{¶18} This assignment of error relates to the trial court's admission of the testimony of Dr. Bedrossian, who is a pathologist. Initially, we address plaintiffs' contention that Honeywell failed to raise an objection to the testimony at trial. The record reflects that the trial court denied Honeywell's motion in limine prior to the commencement of trial. A ruling on a motion in limine may not be appealed, and a party's failure to raise objections during trial waives all but plain error. *State v. Trimble*, 122 Ohio St.3d 297, 2009-Ohio-2961, 911 N.E.2d 242, ¶ 132; *State v. Diar*, 120 Ohio St.3d 460, 2008-Ohio-6266, 900 N.E.2d 565, ¶ 70. Honeywell maintains that it raised an objection at trial and that a sidebar was held. However, no objection appears in the referenced portion of the transcript. Even assuming a proper objection had been raised, we find no error in the trial court's admission of the testimony.

{**¶19**} Dr. Bedrossian is board-certified in anatomical and clinical pathology and in cytopathology. He testified to his extensive experience with asbestos-related diseases,

including pleural and peritoneal mesothelioma. He has written numerous publications on asbestos-related disease and has reviewed medical literature relating to the subject over the course of his career.

{**[20]** Dr. Bedrossian testified that mesothelioma is a "sentinel event" or "a signal tumor," and that "when you diagnose mesothelioma, it is considered caused by asbestos until proven otherwise." He indicated that it is a rare disease that can result from secondary exposure, and that "all it takes is proximity to where the asbestos is, the duration of the exposure, and frequency of the exposure, and ultimately there must be contact between the fiber and the susceptible cells." He testified about the "specific biological mechanisms" by which inhaled asbestos fibers can cause the disease.

{**¶21**} Dr. Bedrossian indicated that there is no known threshold of asbestos exposure at which mesothelioma will not occur in people. He acknowledged that although there is a background concentration of asbestos that may be found in the air anywhere, that amount is minuscule. He testified that "it takes cumulative exposures" above background to cause mesothelioma.

{**[22**} Dr. Bedrossian's testimony included a discussion of medical literature, articles, and studies supporting his opinion that chrysotile asbestos is a cause of pleural and peritoneal mesothelioma, and the concept of cumulative exposure. Dr. Bedrossian noted a statement from the literature that "there is a general agreement among many scientists and agencies that exposure to any type of asbestos, chrysotile or amphibole, increased the likelihood of lung cancer and mesothelioma[.]" The literature also

indicated that the risks of disease "increased with cumulative exposures to chrysotile and \* \* \* also with time since first exposure." Dr. Bedrossian discussed the greater susceptibility of children to contracting asbestos-related diseases.

{**Q23**} Dr. Bedrossian's testimony also discussed an article by the Environmental Protection Agency ("EPA") that found "millions of asbestos fibers can be released during brake and clutch servicing." Dr. Bedrossian agreed that when visible dust clouds are present during brake work, thousands of fibers are being seen. Dr. Bedrossian further agreed with the EPA's determination that "asbestos released into the air lingers around the garage long after a brake job is done and can be breathed in by everyone inside a garage including customers." Additionally, he agreed with the EPA's findings that mesothelioma can be caused by very low exposures to asbestos, the cancer has occurred among brake mechanics and their wives, even hitting a brake drum with a hammer can release over a million asbestos fibers, and the asbestos fibers released from brake and clutch work can be scattered throughout a garage where they can present a hazard for months or years. Dr. Bedrossian discussed other articles linking asbestos disease to brake repair and brake workers.

{**¶24**} Dr. Bedrossian reviewed the data and was asked to make certain assumptions in the case. He opined that both Schwartz's exposures to asbestos-containing brakes made by Bendix and her exposure to asbestos dust brought home from her father's job contributed to her cumulative exposure to asbestos fibers, which was a substantial factor in causing Schwartz's peritoneal mesothelioma. He ruled

out every other cause of mesothelioma except asbestos and found "the cumulative exposure to asbestos was the cause of her mesothelioma." Dr. Bedrossian further stated that when referring to cumulative exposure, he was talking about exposures that are "significant[,] meaning above background."

{**q25**} Contrary to Honeywell's position, Dr. Bedrossian's causation opinion was not premised on a rigid application of the "each and every exposure" theory. Although some courts have rejected the "each and every exposure" theory, others have distinguished testimony suggesting a de minimis exposure to asbestos could cause mesothelioma from testimony that each significant exposure to asbestos could be a cause. *Osterhout v. Crane Co.*, N.D.N.Y. No. 5:14-CV-208 (MAD/DEP), 2016 U.S. Dist. LEXIS 39890, \*67 (Mar. 21, 2016). Further, courts have routinely accepted testimony that "mesothelioma can result from minor exposures to asbestos products, which is routinely established through medical testimony, OSHA regulations, and EPA regulations." *Id.*, citing *Neureuther v. Atlas Copco Compressors, L.L.C.*, S.D.III. No. 13-cv-1327-SMY-SCW, 2015 U.S. Dist. LEXIS 110169, \*15 (Aug. 20, 2015).

{**¶26**} Ohio law applies a "substantial factor" test that considers the "manner, proximity, and frequency" of exposure to establish causation in asbestos cases. R.C. 2307.96(B). Dr. Bedrossian considered the facts of the case, involving the manner, proximity, and frequency of exposure, and testified that it was Schwartz's cumulative exposure to asbestos, comprised of exposures from her father's brake work and from his

job, that caused her mesothelioma. He found these exposures to be substantial, significant, and contributing factors leading to Schwartz's development of mesothelioma.

{**[27**} Dr. Bedrossian had been asked to assume that Webber had changed asbestos-containing brakes approximately a half dozen times during the time Schwartz lived in the family home. Dr. Bedrossian's testimony indicated thousands, if not millions, of fibers can be released during brake work, which fibers can linger and present a hazard for months or years. Dr. Bedrossian reviewed the pertinent facts in the case, reviewed medical, scientific, and regulatory literature on the relevant subjects, and applied his own knowledge, education, training, and experience to formulate his opinion.

{**Q28**} Many of the criticisms raised by Honeywell are similar to those rejected by this court in *Walker v. Ford Motor Co.*, 8th Dist. Cuyahoga No. 100759, 2014-Ohio-4208. As recognized in *Walker*, "an expert's opinion need not be generally accepted in the scientific community to be sufficiently reliable" and "'[e]ven a novel or "controversial" opinion may be reliable if founded on a proper methodology." *Id.* at ¶ 30, citing and quoting *State v. Nemeth*, 82 Ohio St.3d 202, 210, 1998-Ohio-376, 694 N.E.2d 1332. "The credibility of the conclusion and the relative weight it should enjoy are determinations left to the trier of fact." *Nemeth* at 210. Further, Honeywell was able to challenge Dr. Bedrossian's testimony through cross-examination and was able to present the testimony of its own expert witnesses.

{**[929**} Because the testimony was relevant, the criteria of Evid.R. 702 were met, and the trial court adequately performed its gatekeeping function, we find no abuse of

discretion in the trial court's admission of the testimony of Dr. Bedrossian. Honeywell's first assignment of error is overruled.

#### Dr. Guth

**{¶30}** Under its second assignment of error, Honeywell claims as follows: The trial court committed reversible error by permitting plaintiff's expert, Joseph Guth, Ph.D., a certified industrial hygienist, to testify, over objections, that decedent's father's occasional non-occupational work with Bendix brakes created a sufficient level of dust that is substantially contributed to increasing decedent's risk for developing peritoneal mesothelioma because such an opinion lacks any foundation in science or fact.

**{¶31}** Dr. Guth is a certified industrial hygienist and chemist with nearly 40 years of experience. He testified to his educational background and credentials at trial. He taught at the university level and operated a private testing laboratory, which was involved with asbestos-related projects. He has testified "hundreds of times" in asbestos litigation. Dr. Guth's opinion in the case was based on his review of the deposition testimony, his review of relevant medical, scientific, and regulatory literature, and his own knowledge, education, training, and experience.

**{¶32}** Because air samples were never collected at the time Schwartz resided in her childhood home, Dr. Guth could not quantify Schwartz's exposure to asbestos from Bendix brakes. He performed a qualitative assessment and offered an opinion about

Schwartz's increased risk of developing mesothelioma. He testified "qualitative" means "we don't necessarily put numbers on [the level of asbestos exposure,] but we know basically if we're looking at severe and significant exposures versus something that was not." He testified to his "knowledge and understanding about what activities and what materials can release enough of a contaminant[,] in this case asbestos fibers[,] that would lead to some type of increased risk to that individual or individuals in that area."

{¶33} Dr. Guth testified about the dangers of asbestos-containing products. He indicated that exposures to chrysotile asbestos can increase one's risk for mesothelioma, both pleural and peritoneal. He discussed medical articles concluding that asbestos fibers are the cause of virtually all cases of human malignant mesothelioma; that all asbestos types, including chrysotile and pleural, have been linked to pleural and peritoneal mesothelioma; and that chrysotile asbestos exposures alone can cause mesothelioma. He further testified that there is no known safe limit, or no known minimum exposure threshold, and he discussed literature and government agencies that supported this view. He also discussed the permissible exposure limits set forth by the Occupational Safety and Health Administration ("OSHA").

{¶34} Dr. Guth testified about secondary exposures and how household exposures can result from asbestos fibers being transported to the home. He indicated that children are more susceptible to asbestos. He discussed an article relating to cumulative exposure. He also discussed the EPA article indicating that millions of fibers can be released during brake and clutch servicing and that the fibers linger around long after the brake job is done and can present a hazard for months or years.

{¶35} Dr. Guth testified that he had conducted either cloud samples or air samples of brakes "like 50 times, maybe more." He testified that his work was not done in a home garage, but rather in repair facilities ranging from facilities for the military to corner gas stations. Most of his work was conducted in the early to middle 1980s. He found that "the dust that collects in these brake drums from use of those brakes can contain under certain circumstances some significant amounts of asbestos fibers from that brake pad or in that brake shoe." He indicated that in his experience "when you start to see any kind of visible dust[,] you are way above OSHA limits with any kind of asbestos containing product if that dust is originating from that product."

**{¶36}** Dr. Guth discussed articles relating to asbestos fibers released from brakes, including chrysotile fibers. One article, which reported results of testing on Bendix brake linings, indicated that "manipulation of new asbestos-containing brake components would be expected to yield free dust containing chrysotile asbestos of respirable size" and found that "there were free fibers associated with [Bendix brake products] right from the factory." This conclusion applied with respect to the samples Dr. Guth tested. Another article, which also referenced Bendix brakes, reported high levels of exposure to asbestos fibers during brake work, including blowing out brake dust from drums, wiping away dust with a rag, and grinding.

**{**¶**37}** Dr. Guth opined that people working with asbestos-containing brake linings would be exposed to "very significant levels of exposure and that they would be put at an increased risk for mesothelioma[,]" along with other household members. After being asked to make certain assumptions in the case, Dr. Guth offered the opinion that Schwartz's childhood home would have been contaminated with significant amounts of asbestos from Webber's brake work and that Webber's clothing that was comingled in the family laundry would have transferred the fibers to the clothing of all other household members and subjected them to secondary exposures. After making further assumptions in the case, Dr. Guth opined that Schwartz would have had significant exposures to asbestos fibers generated from the Bendix brakes used by Webber. Dr. Guth further opined that Schwartz would have been at increased risk for mesothelioma "because we don't know of a level that was safe and we do know these fibers derived from that kind of product and moving through the home and through the laundry process would have continued to expose her for literally years." Dr. Guth also found that Webber's workplace exposures to asbestos-containing products would have increased Schwartz's risk for mesothelioma.

{**¶38**} A quantitative analysis or testimony regarding a dose-response relationship was not necessary for rendering the challenged testimony admissible. As recognized by the Sixth District:

"[R]arely are humans exposed to chemicals in a manner that permits a quantitative determination of adverse outcomes. \* \* \* Consequently, while precise information concerning the exposure necessary to cause specific harm to humans and exact detail pertaining to the plaintiff's exposure are

beneficial, such evidence is not always available, or necessary, to demonstrate that a substance is toxic to humans given substantial exposure and need not invariably provide the basis for an expert's opinion on causation."

*Cutlip v. Norfolk S. Corp.*, 6th Dist. Lucas No. L-02-1051, 2003-Ohio-1862, ¶ 52, quoting *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 264 (4th Cir.1999).

**{**¶**39}** Honeywell also complains that Dr. Guth's personal experience of testing brake dust was not conducted in a home garage. However, Dr. Guth acknowledged this in his testimony. The evidence was offered to demonstrate the release of significant asbestos fibers during substantially similar types of brake work, which was directly related to the type of exposure involved in this case. As the Ohio Supreme Court has recognized, when an experiment is not represented to be a reenactment and deals with one aspect or principle directly related to the cause or result of the occurrence, the exact conditions need not be duplicated. Miller, 80 Ohio St.3d at 614-615, 1998-Ohio-178, 687 N.E.2d 735. "Quite obviously, if we were to hold that a test or experiment must exactly recreate the conditions present at the time an injury was sustained, a plaintiff would rarely be able to overcome an opponent's motion for summary judgment. We are unwilling to require such proof." Miller at 615. Any dissimilarity between the tests and the conditions to which Schwartz was exposed goes to the weight of the evidence, not to its admissibility. See id.; see also Werts v. Goodyear Tire & Rubber Co., 8th Dist. Cuyahoga No. 91403, 2009-Ohio-2581, ¶ 12-13, 23.

{**[40]** Further, we are not persuaded by Honeywell's argument that Dr. Guth's opinions were not supported by peer-reviewed literature. The record reflects that Dr.

Guth's testimony included a review of numerous publications supporting his opinions. Even had there been a lack of peer review or general acceptance by the scientific community, these are not prerequisites to admissibility. *Miller* at 613. "Relevant evidence based on valid principles will satisfy the threshold reliability standard for the admission of expert testimony. The credibility to be afforded these principles and the expert's conclusions remain a matter for the trier of fact." *Nemeth*, 82 Ohio St.3d at 211, 1998-Ohio-376, 694 N.E.2d 1332.

{**¶41**} On the record before us, we find Dr. Guth's testimony complied with the requirements of Evid.R. 702 and the trial court did not abuse its discretion in allowing plaintiffs' expert to testify. Honeywell's second assignment of error is overruled.

#### **Directed Verdict --- Causation**

**{**¶**42}** Under its third assignment of error, Honeywell claims as follows:

The trial court committed reversible error by denying defendant's motion for a directed verdict as to plaintiff's claims, because plaintiff's evidence was legally insufficient to establish that Honeywell's product was either generally or specifically causative of decedent's peritoneal mesothelioma.

 $\{\P43\}$  We employ a de novo standard of review in evaluating the grant or denial of a motion for directed verdict. *Groob v. KeyBank*, 108 Ohio St.3d 348, 2006-Ohio-1189, 843 N.E.2d 1170, ¶ 14. A motion for directed verdict is properly granted if "the trial court, after construing the evidence most strongly in favor of the party against whom the motion is directed, finds that upon any determinative issue reasonable minds could come to but one conclusion upon the evidence submitted and that conclusion is adverse to such party." Civ.R. 50(A)(4).

{¶44} In cases involving exposure to a toxic substance, expert medical testimony is generally necessary to establish both general causation, i.e., that the toxic substance is capable of causing the particular disease, and specific causation, i.e., that the disease was in fact caused by the toxic substance. *Terry*, 115 Ohio St.3d, 351, 2007-Ohio-5023, 875 N.E.2d 72, paragraph one of the syllabus; *Walker*, 8th Dist. Cuyahoga No. 100759, 2014-Ohio-4208, at ¶ 21.

{¶45} Further, the Ohio Supreme Court has held that "[f]or each defendant in a multidefendant asbestos case, the plaintiff has the burden of proving exposure to the defendant's product and that the product was a substantial factor in causing the plaintiff's injury." *Horton v. Harwick Chem. Corp.*, 73 Ohio St.3d 679, 1995-Ohio-286, 653 N.E.2d 1196, paragraph one of the syllabus; *see also* R.C. 2307.96.

 $\{\P46\}$  The "substantial factor" test is set forth under R.C. 2307.96(B),<sup>3</sup> which provides:

In determining whether exposure to a particular defendant's asbestos was a substantial factor in causing the plaintiff's injury or loss, the trier of fact in the action shall consider, without limitation, all of the following:

(1) The manner in which the plaintiff was exposed to the defendant's asbestos;

<sup>&</sup>lt;sup>3</sup> The notes to R.C. 2307.96 indicate that "[t]he consideration of these factors involving the plaintiff's proximity to the asbestos exposure, frequency of the exposure, or regularity of the exposure in tort actions involving exposure to asbestos is consistent with the factors listed by the court in *Lohrmann v. Pittsburgh Corning Corp.*, [782 F.2d 1156 (4th Cir.1986)]."

(2) The proximity of the defendant's asbestos to the plaintiff when the exposure to the defendant's asbestos occurred;

(3) The frequency and length of the plaintiff's exposure to the defendant's asbestos;

(4) Any factors that mitigated or enhanced the plaintiff's exposure to asbestos.

{**¶47**} Plaintiffs presented expert testimony indicating that exposure to chrysotile asbestos is a cause of pleural and peritoneal mesothelioma, and that Schwartz's significant and cumulative exposure to asbestos fibers from Bendix brakes was a cause of her peritoneal mesothelioma. Moreover, there was evidence to support a finding that Schwartz's exposures to asbestos fibers from Bendix brakes was a substantial factor in causing her peritoneal mesothelioma.

**{¶48}** Plaintiffs introduced evidence of the manner, proximity, frequency, and regularity of Schwartz's exposure to Bendix brakes. The evidence in this case showed that during the relevant time period, Schwartz was exposed to asbestos from Bendix brakes that was released into the family home through her father's brake work in the garage. Webber changed his Bendix brakes at least a half dozen times and would remove and wipe down the brakes annually. He testified to seeing "a lot of brake dust" when performing this brake work. Although no expert quantified the precise amount of chrysotile asbestos to which Schwartz would have been exposed from Bendix brakes, the expert testimony indicated that significant amounts of respirable fibers would have been released into the garage and the home; that visible dust far exceeds known safe limits and

would have increased the risk of developing mesothelioma; that the asbestos fibers would have lingered around long after the brake work was done; that Schwartz, who resided in the family home for 18 years, experienced significant levels of exposure; that youth can be an aggravating factor; and that Schwartz's cumulative exposure was the cause of her mesothelioma. The opinions of Plaintiffs' experts were based on reliable scientific evidence.

**{¶49}** Construing the evidence most strongly in favor of plaintiffs, we find that reasonable minds could have found in favor of plaintiffs on the causation issues. Honeywell's third assignment of error is overruled.

#### **Directed Verdict --- Design Defect**

**{¶50}** Under its fourth assignment of error, Honeywell claims as follows: The trial court committed reversible error by denying defendant's motion for a directed verdict as to plaintiff's statutory claim for design defect. Pursuant to R.C. 2307.75(F), plaintiff's evidence at trial was legally insufficient because plaintiff failed to present any evidence that a practical and technically feasible alternative design or formulation was available at the time of use which would not have substantially impaired the usefulness or intended purpose of defendant's product.

{¶51} In the fourth assignment of error, Honeywell argues the trial court erred in overruling its motion for directed verdict on plaintiffs' statutory claim for design defect.Under Ohio's products liability act, a product is defective in design if, "at the time it left

the control of its manufacturer, the foreseeable risks associated with its design or formulation \* \* \* exceeded the benefits associated with that design or formulation," R.C. 2307.75(A). To succeed on a design-defect claim, a plaintiff must establish, by a preponderance of the evidence, that (1) the product was defective in design or formulation, was defective due to inadequate warning or instruction, or was defective because it did not conform to its manufacturer's representation; (2) the defective design was a proximate cause of the harm for which the plaintiff seeks to recover compensatory damages; and (3) the manufacturer designed the actual product that caused the plaintiff's harm. R.C. 2307.73(A). A product will not be considered defective in design unless the plaintiff demonstrates that a practical and technically feasible alternative design to the product was available that would have prevented the harm for which the plaintiff seeks to recover, without substantially impairing the usefulness of the product. *Zang v. Cones*, 1st Dist. Hamilton No. C-140274, 2015-Ohio-2530, ¶ 17, citing R.C. 2307.75(F).

{¶52} Expert testimony is not necessary to establish a design-defect claim if the subject matter involved is not overly complex and is within the knowledge and comprehension of a layperson. Zang at ¶ 32, citing Adkins v. Yamaha Motor Corp., 2014-Ohio-3747, 17 N.E.3d 654, ¶ 24 (4th Dist.).

Although, expert testimony may be required if the existence of a technically feasible alternative design is knowledge beyond that possessed by the average lay person, if a claim involves a simple device without complex features or designs, circumstantial evidence may be sufficient to establish that a defect existed.

(Citations omitted.) Adkins at  $\P$  57. This is not a case in which the alleged design defect and the existence of a technically feasible alternative is so complex as to be beyond the knowledge of a layperson. {¶53} In this case, there was testimony and record evidence supporting plaintiffs' design-defect claim. There was testimony and evidence showing that Bendix was manufacturing non-asbestos-containing brakes during the period of time relevant to this case. The testimony of Bendix's corporate representative, Joel Cohen, established that Bendix corporation had developed an asbestos-free braking product for certain passenger-type vehicles as early as 1968 or 1969. Further, there was evidence that "semimetallics [non-asbestos-containing brakes] operate satisfactorily" in passenger cars and "[t]he improved performance of semimetallics compensates for their higher costs[.]" Thus, there was evidence supporting plaintiffs' claim that a safer, practical, and technically feasible alternative design was available. After viewing this evidence in a light most favorable to plaintiffs, the trial court was compelled to deny Honeywell's motion for directed verdict. Honeywell's fourth assignment of error is overruled.

#### The Welch Article

**{¶54}** Under its fifth assignment of error, Honeywell claims as follows:

The trial court committed reversible error by permitting plaintiff, over objections, to use and rely upon an amicus brief which was subsequently published and entitled "Asbestos Exposure Causes Mesothelioma, But Not This Asbestos Exposure: An Amicus Brief to the Michigan Supreme Court" because the article is hearsay for which there is no valid exception to its exclusion.

{¶55} In the fifth assignment of error, Honeywell argues the trial court erred in denying its motion in limine to exclude an article entitled "Asbestos Exposure Causes Mesothelioma, But Not This Asbestos Exposure: An Amicus Brief to the Michigan Supreme Court" by Dr. Laura S. Welch ("the Welch article"). Honeywell argues the article is hearsay for which there is no valid exception.

**{¶56}** A trial court is vested with broad discretion in determining the admissibility of evidence so long as such discretion is exercised in compliance with the rules of procedure and evidence. *Rigby v. Lake Cty.*, 58 Ohio St.3d 269, 569 N.E.2d 1056 (1991). "'Hearsay' is a statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted." Evid.R. 801(C). Pursuant to Evid.R. 802, hearsay is inadmissible unless it falls within one of the exceptions listed in Evid.R. 803.

{**¶57**} Plaintiffs argue the Welch article falls within the "Learned Treatise" exception to the hearsay rule provided in Evid.R. 803(18). Evid.R. 803(18) establishes that an expert witness may discuss the content of learned treatises during direct examination so long as the treatise has been established as reliable authority.

{¶58} We recognize cases involving plaintiffs with mesothelioma have specifically addressed the admissibility of the Welch article as a learned treatise. *See, e.g., Yates v. Ford Motor Co.*, E.D.N.C. No. CV-752-FL, 2015 U.S. Dist. LEXIS 70476 (May 30, 2015); *Gibboney v. A.W. Chesterton Co.*, Cuyahoga C.P. No. 676502, 2011 Ohio Misc. LEXIS 1026 (July 15, 2011). These courts concluded that although the Welch article is

a work of professional literature, it was not admissible under the learned treatise exception to the hearsay rule because it lacked the indicia of reliability required for admissibility. *Yates* at \*28; *Gibboney* at \*4-6. Those cases focused on the fact that the article was used as an advocacy piece. We do not reach the same conclusion herein.

**{¶59}** We are not persuaded that the Welch article lacks the necessary reliability to qualify as a learned treatise. The Welch article is a collection of evidence to support the conclusion that asbestos dust from brakes causes mesothelioma. In addition to Dr. Welch, there are 51 signatories to the article. The article states: "The signers of this paper represent hundreds of years of experience researching, diagnosing and treating asbestos-related diseases in workers and their families." The signers "have published extensively in this field for more than 30 years and have conducted dozens of epidemiologic and other studies into the issues of asbestos and disease." The article contains 78 references to outside sources. Although the article was submitted as an amicus brief to the Michigan Supreme Court, it was also published in a medical journal subject to peer review.

{**¶60**} Under Evid.R. 803(18), a learned treatise established as reliable by expert testimony is admissible for substantive purposes if relied upon by the expert in direct examination. The expert testimony in this case established that Welch and the other 51 signers of the article are well respected in the field of asbestos-related disease. Both Dr. Bedrossian and Dr. Guth endorsed the Welch article and its conclusions. Under these

circumstances, we do not find the trial court abused its discretion in permitting plaintiffs' experts to use the Welch article in support of their opinions.

{**¶61**} Even had we found the Welch article to be inadmissible hearsay, we find that any error in allowing plaintiffs' experts to testify regarding any statements contained in the Welch article would amount to harmless error. A court's error may be considered harmless if it does not affect the substantial rights of the parties. *Cappara v. Schibley*, 85 Ohio St.3d 403, 709 N.E.2d 117 (1999).

{**[62**} The admission of statements from the Welch article was harmless because it was cumulative to other admissible evidence on the issue of causation. Dr. Bedrossian and Dr. Guth both discussed numerous other peer-reviewed articles that shared the Welch article's conclusion that asbestos from brakes can and does cause mesothelioma. Under these circumstances, the Welch article would not have made a difference to the outcome of the trial. Therefore, its admission into evidence was harmless. Honeywell's fifth assignment of error is overruled.

#### **Cross-appeal** — **Punitive Damages**

{**¶63**} In the cross-appeal, plaintiffs raise one assignment of error that claims as follows:

The trial court committed reversible error by *sua sponte* granting a directed verdict against plaintiffs on their claim for punitive damages where the jury heard evidence establishing that defendant acted with "conscious disregard

for the rights and safety of other persons that has a great probability of causing substantial harm."

**{**¶**64}** Plaintiffs challenge the trial court's directed verdict on their claim for punitive damages. Pursuant to R.C. 2307.80(A), a plaintiff is entitled to recover punitive damages on a product liability claim when the plaintiff establishes, by clear and convincing evidence, that the requisite harm "was the result of misconduct of the manufacturer or supplier in question that manifested a flagrant disregard of the safety of persons who might be harmed by the product in question."

{**¶65**} Initially, the record reflects that prior to trial, Honeywell filed a motion to dismiss the claim for punitive damages, but requested the court to bifurcate the punitive damages phase of the trial and defer ruling on the motion to dismiss until after the compensatory damages phase of the trial. Plaintiffs had no objection to the bifurcation. The trial court granted the motion to bifurcate and deferred ruling on the motion to dismiss.

{**¶66**} After the jury returned its verdict awarding compensatory damages to plaintiffs, the trial judge dismissed the jurors. Thereupon, a discussion was had off the record, followed immediately by the following statement by the trial court: "With respect to the plaintiff's request about punitive damages, I've directed a verdict in favor of the defendant on the issue of punitive damages." From the record, it can be inferred that Honeywell renewed its motion for a directed verdict on the punitive damages claim off the record.

{¶67} Plaintiffs argue the trial court did not state the reason for its decision on the record. Because plaintiffs failed to raise an objection, they waived the requirement under Civ.R. 50(E) for the court to state the basis for its decision to grant a directed verdict. *Snavely Dev. Co. v. Acacia Country Club*, 8th Dist. Cuyahoga No. 86475, 2006-Ohio-1563, ¶ 25. However, on appeal, plaintiffs still may challenge the trial court's decision to grant the directed verdict. *See generally id.* at ¶ 29; *Joseph G. Stafford & Assocs. v. Skinner*, 8th Dist. Cuyahoga No. 68597, 1996 Ohio App. LEXIS 4803, \*14 (Oct. 31, 1996).

**{¶68}** Plaintiffs argue that the trial court erred because there was substantial evidence in the record to support their claim for punitive damages. Plaintiffs claim the evidence presented at trial revealed that Bendix sold asbestos-containing brakes, first without warning, and later with an inadequate warning; that Bendix continued to manufacture asbestos-containing brakes for more than 30 years after it had developed an asbestos-free alternative; that Bendix delayed placing adequate warnings on its product and delayed manufacturing asbestos-free brakes because of cost concerns; and that Bendix engaged in the foregoing conduct long after having direct knowledge that asbestos in brake dust causes deadly diseases, including mesothelioma.

{**¶69**} Plaintiffs' expert, Dr. David Rosner, a Harvard University educated historian and Columbia University professor, testified to the evolution of scientific knowledge concerning asbestos-related disease. His review of available literature revealed that in the 1960s it became widely accepted that asbestos exposure causes

mesothelioma and that secondary exposures could cause asbestos-related disease. Further, by 1968 researchers had established that all forms of asbestos, including chrysotile asbestos, could cause mesothelioma. Dr. Rosner discussed an article from 1968 linking chrysotile asbestos found in brakes with mesothelioma. There was documentary evidence in the case showing Bendix's awareness of the reports of dangers of asbestos in the 1960s, and its direct knowledge of the hazards of asbestos in the 1970s. There also was evidence of resistance by the brake industry, including Bendix, to comply with OSHA's standard for warning labels, followed by warning labels that arguably were not adequate. Finally, there was evidence that despite having non-asbestos alternatives available as early as 1968 or 1969, Bendix continued manufacturing asbestos-containing brakes.

{**¶70**} Although Honeywell counters with other evidence in the case, and claims there is no evidence that Bendix failed to comply with any governmental safety or performance standard with respect to any Bendix brakes, those are matters that go to the weight of the evidence and its defense. As the Ohio Supreme Court has stated:

"The law in Ohio regarding directed verdicts is well formulated. In addition to Civ.R. 50(A), it is well established that the court must neither consider the weight of the evidence nor the credibility of the witnesses in disposing of a directed verdict motion. \* \* \* Thus, if there is substantial competent evidence to support the party against whom the motion is made, upon which evidence reasonable minds might reach different conclusions, the motion must be denied." (Citations and quotations omitted.)

*Estate of Cowling v. Estate of Cowling*, 109 Ohio St.3d 276, 2006-Ohio-2418, 847 N.E.2d 405, ¶ 31, quoting *Strother v. Hutchinson*, 67 Ohio St.2d 282, 284-285, 423 N.E.2d 467 (1981).

{**[71]** Upon our review, we find plaintiffs presented substantial competent evidence to defeat a motion for directed verdict. Upon construing the evidence most strongly in plaintiffs' favor, reasonable minds could reach different conclusions on the issue of whether there was clear and convincing evidence that Bendix manifested a flagrant disregard of the safety of persons who might be harmed by the product in question. Accordingly, the trial court erred in granting a directed verdict on the issue of punitive damages. On remand, the trial court is directed to conduct a new trial on the issue of punitive damages. *See Link v. FirstEnergy Corp.*, 2014-Ohio-5432, 25 N.E.3d 1095, **[** 53 (8th Dist.). Plaintiffs' assignment of error is sustained.

#### Conclusion

 $\{\P72\}$  For the foregoing reasons, we affirm the judgment in favor of plaintiffs, and we reverse the trial court's directed verdict on punitive damages. We remand this cause to the trial court to conduct a new trial on plaintiffs' claim for punitive damages. "[I]f the trier of fact determines that the manufacturer or supplier in question is liable for punitive or exemplary damages in connection with a product liability claim, the amount of those damages shall be determined by the court." R.C. 2307.80(B).

**{¶73}** Judgment affirmed in part; reversed in part. Case remanded.

It is ordered that appellees recover from appellants costs herein taxed. The court finds there were reasonable grounds for this appeal.

It is ordered that a special mandate issue out of this court directing the common pleas court to carry this judgment into execution.

A certified copy of this entry shall constitute the mandate pursuant to Rule 27 of the Rules of Appellate Procedure.

SEAN C. GALLAGHER, JUDGE

KATHLEEN ANN KEOUGH, P.J., and FRANK D. CELEBREZZE, JR., J., CONCUR