STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PROVIDENCE, SC. **SUPERIOR COURT**

(FILED: June 13, 2013)

ROSIE K. SWEREDOSKI, as Personal Representative of the Estate of DOUGLAS A. SWEREDOSKI, and Individually Recognized as Surviving Spouse	:	**C.A. No. PC 2011-1544**
v.	:	
ALFA LAVAL, INC., et al.	:	

DECISION

GIBNEY, P.J. In this asbestos action, Crane Co. (Defendant), Individually and as Successor to Chempump, Jenkins Bros., Weinman Pump Manufacturing Company, Pacific Steel Boiler Corporation, Thatcher Boiler, Chapman Valve Company, and Cochrane, brings a Motion in Limine (the Motion), seeking to bar admission of so-called "each and every exposure" evidence[1] at trial, contending it is legally insufficient to prove causation and is based upon scientifically invalid reasoning. Rosie K. Sweredoski (Plaintiff), as Personal Representative of the Estate of Douglas A. Sweredoski (Sweredoski), and Individually Recognized as Surviving Spouse, opposes the Motion. She argues that such evidence is not in issue in this case and, even if it were, it is admissible as scientifically valid proof of the inherent dangers of cumulative asbestos exposure. Jurisdiction is pursuant to G.L. 1956 § 8-2-14.

[1] "Each and every exposure" evidence describes expert evidence demonstrating that "each and every fiber of inhaled asbestos is a substantial contributing factor to any asbestos-related disease." Betz v. Pneumo Abex, LLC, 44 A.3d 27, 30 (Pa. 2012); see Holcomb v. Georgia Pacific, LLC, 289 P.3d 188, 197 (Nev. 2012) (describing the "each and every exposure" theory as "the position . . . that 'any' or 'each and every' exposure, even if it is just one strand of asbestos, is a substantial factor in causing mesothelioma").

I

Facts and Travel

During his five-year tour of duty in the United States Navy, Sweredoski served on board the U.S.S. Independence (the Independence) from 1965 to 1967 as a fireman and boiler operator in the ship's boiler rooms. Among other tasks, Sweredoski replaced packing and gaskets in steam valves allegedly designed and manufactured by Defendant. Both the packing and gaskets contained asbestos.

Plaintiff alleges that Sweredoski developed malignant mesothelioma,[2] sickened, and eventually died as a result of exposure to these packing and gaskets. Plaintiff has asserted a number of tort- and warranty-based claims against Defendant, arguing that Defendant owed to Sweredoski a duty to warn him of the dangers of working with and around its products.

Defendant filed the instant Motion on February 22, 2013. It contends that to prove the causation element of asbestos cases in Rhode Island, a plaintiff must show that exposure to a particular defendant's product was a substantial factor in bringing about the plaintiff's injury. Defendant argues that evidence that "each and every exposure" to asbestos is unsafe and leads to the development of disease is legally insufficient to satisfy this standard because it permits the trier of fact to consider instances of minimal or negligible exposure as substantial causes. Defendant asserts, therefore, that the probative value of such evidence is outweighed by the danger of misleading or confusing the trier of fact. Defendant maintains that the reasoning

[2] Mesothelioma "is a rare tumor arising from the mesothelial cells lining the pleural, pericardial and peritoneal cavities [of a person's lungs]." Wilbur v. Owens-Corning Fiberglas Corp., 476 N.W.2d 74, 75 (Iowa 1991); see State Industrial Ins. System v. Jesch, 709 P.2d 172, 174 (Nev. 1985) (noting that "[m]esothelioma generally involves a latency period of at least twenty-five to thirty years . . . Malignant mesotheliomas are almost always fatal within the year following diagnosis. Treatment modalities rarely produce a cure. It is also extremely rare to observe malignant mesothelioma in persons not exposed to asbestos").

underlying "each and every exposure" evidence is scientifically invalid and relies on novel "junk science" as well. Accordingly, Defendant argues, "each and every exposure" evidence—in all of its forms—should be excluded at trial.

Plaintiff contends that Defendant's argument regarding "each and every exposure" evidence is "essentially moot" because she intends to submit evidence showing that Sweredoski's exposure to asbestos while working on Defendant's valves was intense and prolonged, not negligible. Plaintiff asserts that such direct evidence of exposure is more than sufficient to satisfy the causation element at trial. Plaintiff argues that even if she intended to present evidence of cumulative, low-dose exposure at trial, such evidence would be admissible because the inherent danger of cumulative exposure to asbestos is firmly established among the scientific community.

II

Discussion

A

Causation in Asbestos Cases

All cognizable negligence claims in Rhode Island must set forth four essential elements: duty, breach, causation, and damages. See Santana v. Rainbow Cleaners, 969 A.2d 653, 658 (R.I. 2009). With regard to causation, "[a] plaintiff must not only prove that a defendant is the cause-in-fact of an injury, but also must prove that a defendant proximately caused the injury." Almonte v. Kurl, 46 A.3d 1, 18 (R.I. 2012); State v. Lead Industries Association, Inc., 951 A.2d 428, 451 (R.I. 2008). A defendant is the cause-in-fact of a plaintiff's injury when there is "a causal relationship between the act or omission of the defendant and the injury to the plaintiff." Almonte, 46 A.3d at 18. To show that a defendant is the proximate cause of the alleged harm, a

plaintiff must present proof "that the harm would not have occurred but for the [defendant's] act and that the harm was a natural and probable consequence of the act." Id.; see Skaling v. Aetna Ins. Co., 742 A.2d 282, 288 (R.I. 1999) (finding that "proximate cause is established by showing that but for the negligence of the tortfeasor, injury to the plaintiff would not have occurred"). In other words, "'[proximate] cause' is that [the defendant's conduct] shall have been a substantial factor in bringing about the harm."[3] Wells v. Uvex Winter Optical, Inc., 635 A.2d 1188, 1191 (R.I. 1994) (quoting Krauss v. Greenbarg, 137 F.2d 569, 572 (3rd Cir. 1943)) (quotation marks omitted) (emphasis in original).

In the asbestos context, plaintiffs must present both product identification and exposure evidence to satisfy the causation element. See Thomas v. Amway Corp., 488 A.2d 716, 718-22 (R.I. 1985); DiPetrillo v. Dow Chemical Co., 729 A.2d 677, 693 (R.I. 1999) (quoting, with approval, jury instructions stating that for toxic tort claims, the plaintiff "has the burden of proving by a preponderance of the evidence that his injuries were proximately caused by exposure to" the defendant's product). Historically, however, asbestos plaintiffs have struggled to "fairly meet the burden of production with regard to causation," owing to such factors as the prevalence of second-hand exposure to airborne asbestos dust, the indistinguishable nature of asbestos fibers from different manufacturers' products, the long latency of asbestos-related diseases, and the difficulty of obtaining witnesses and other probative evidence of exposure years

[3] According to the Restatement 2d Torts § 431:

> "The word 'substantial' is used to denote the fact that the defendant's conduct had such an effect in producing the harm as to lead reasonable men to regard it as a cause, using that word in the popular sense, in which there always lurks the idea of responsibility, rather than in the so-called 'philosophic sense,' which includes every one of a great number of events without which any happening would not have occurred."

after the fact. Thacker v. UNR Industries, Inc., 603 N.E.2d 449, 455-56 (Ill. 1992); see Holcomb, 289 P.3d at 193 (recognizing that "[g]iven the often lengthy latency period between exposure and manifestation of injury [in asbestos cases], poor record keeping, and the expense of reconstructing such data . . . [,]" asbestos plaintiffs have had difficulty proving the causation element). "To remedy this situation . . . courts have fashioned a variety of causation standards in an attempt to balance the interests of plaintiffs with the interests of nonresponsible defendants." Holcomb, 289 P.3d at 193; see Thacker, 603 N.E.2d at 456-57 (collecting cases and noting the different approaches taken by various courts). As our Supreme Court has not specifically addressed this issue, this Court looks to the approaches of other jurisdictions. See Santana, 969 A.2d at 659 (explaining that Rhode Island courts "need not write on a blank slate [when] other jurisdictions have [already] addressed [a new and] vexing issue, and [our courts should] look to them for guidance"); Liberty Mutual Ins. Co. v. Harbor Ins. Co., 603 A.2d 300, 302 (R.I. 1992) (finding same).

1

The "Exposure-to-Risk" Test

The "exposure-to-risk" test is one standard of causation utilized in asbestos cases. See Rutherford v. Owens-Illinois, Inc., 16 Cal. 4th 953 (1997). In Rutherford, a life-long marine worker alleged that his lung cancer was caused by cumulative occupational exposure to various defendants' asbestos products. 16 Cal. 4th at 958-59. The Supreme Court of California, recognizing that "[p]roof of causation in such cases will always present inherent practical difficulties, given the long latency period of asbestos-related disease[] and the occupational settings that commonly exposed the worker to multiple forms and brands of asbestos products with varying degrees of toxicity," nonetheless determined that "no insuperable barriers prevent

an asbestos-related cancer plaintiff from demonstrating that exposure to the defendant's asbestos products was . . . a substantial factor in causing or contributing to his risk of developing cancer." Id. at 957. In furtherance, the court promulgated the following test:

> "[P]laintiffs may prove causation in asbestos-related cancer cases by demonstrating that the plaintiff's exposure to defendant's asbestos-containing product in reasonable medical probability was a substantial factor in contributing to the aggregate dose of asbestos the plaintiff or decedent inhaled or ingested, and hence to the risk of developing asbestos-related cancer, without the need to demonstrate that fibers from the defendant's particular product were the ones, or among the ones, that actually produced the malignant growth."

Id. at 976-77 (emphasis in original).

This Court finds that the "exposure-to-risk" test "does not strike the proper balance [between the interests of plaintiffs and defendants], as its extraordinarily relaxed nature does not afford enough protection for manufacturers that may not have caused the resulting disease." Holcomb, 289 P.3d at 194. Indeed, our Supreme Court has consistently held that in cases requiring expert testimonial evidence, such as asbestos exposure cases, "such evidence must speak in terms of 'probabilities' rather than 'possibilities.'" Almonte, 46 A.3d at 18 (quoting Sweet v. Hemingway Transport, Inc., 333 A.2d 411, 415 (R.I. 1975)) (quotation marks omitted). "'Although absolute certainty is not required, the expert must show that the result most probably came from the cause alleged.'" Almonte, 46 A.3d at 18 (quoting Perry v. Alessi, 890 A.2d 463, 468 (R.I. 2006)) (emphasis added). The "exposure-to-risk" test requires only that the plaintiff demonstrate that "the contribution of the individual cause [is] more than negligible or theoretical." Rutherford, 16 Cal. 4th at 978. This Court finds that such a requirement represents too lenient a causation standard under the jurisprudence of this state. See Lariviere v. Dayton Safety Ladder Co., 525 A.2d 892, 896 (R.I. 1987) (noting that "the mere use of an allegedly

defective product [does] not establish a causal nexus between a product and the plaintiff's injuries"); Thomas, 488 A.2d at 718-22 (finding same in the exposure context).

2

The "Defendant-Specific-Dosage-Plus-Substantial-Factor" Test

Another recognized standard of causation is the "defendant-specific-dosage-plus-substantial-factor" test. See Borg-Warner Corp. v. Flores, 232 S.W.3d 765 (Tex. 2007). In Flores, the plaintiff, a mechanic, sued a defendant automotive brake-pad manufacturer, alleging that his asbestosis was caused by exposure to asbestos dust generated from grinding the defendant's products. 232 S.W.3d at 766. The plaintiff presented evidence that he had worked with the defendant's products "on five to seven of the roughly twenty brake jobs he performed each week" from 1972 to 1975. See id.

The Supreme Court of Texas acknowledged the "proof difficulties accompanying asbestos claims . . . [, t]he long latency period for asbestos-related diseases, coupled with the inability to trace precisely which fibers caused disease and from whose product they emanated, make this process inexact." Id. at 772. It found that evidence of regular exposure to "some" unspecified quantity of asbestos, however, "is necessary but not sufficient [to satisfy the causation element], as [such evidence] provides none of the quantitative information necessary to support causation under Texas law." Id. Accordingly, the court adopted a test requiring the plaintiff to show:

> "[d]efendant-specific evidence relating to the approximate dose [of asbestos fibers] to which the plaintiff was exposed, coupled with evidence that the dose was a substantial factor in causing the asbestos-related disease . . . Because most chemically induced adverse health effects clearly demonstrate 'thresholds,' there must be reasonable evidence that the exposure was of sufficient magnitude to exceed the threshold before a likelihood of 'causation' can be inferred."

Id. at 773. The court noted further that "proof of causation may differ depending on the product at issue [because] 'in some products, the asbestos is embedded and fibers are not likely to become loose or airborne, while in other products, asbestos is friable.'"[4] Id. (quoting In re Ethyl Corp., 975 S.W.2d 606, 617 (Tex. 1998)). The court ultimately found for the defendant, holding that the plaintiff had failed to present evidence of "the approximate quantum of [asbestos] fibers to which he was exposed." Flores, 232 S.W.3d at 774.

This Court finds that this strict formulation of the causation standard for asbestos cases "overburdens the claimant, who might not be able to sufficiently demonstrate not only the dosage quantity of exposure to a particular defendant's product but also the total asbestos dosage to which he was exposed." Holcomb, 289 P.3d at 195; see Spaur v. Owens-Corning Fiberglass Corp., 510 N.W.2d 854, 861 (Iowa 1994) (finding that "it is not necessary and indeed may be impossible to establish exactly how much one party's asbestos product contributed to the resulting injury"). As our Supreme Court noted, "specific direct evidence of . . . proximate cause is not always necessary." Seide v. State, 875 A.2d 1259, 1268-69 (R.I. 2005). Instead, "'causation [may be] proved by inference.'" Gianquitti, 973 A.2d at 592 (quoting Seide, 875 A.2d at 1269). "When inference is employed to establish causation, 'proof by inference need not exclude every other possible cause, . . . it must be based on reasonable inferences drawn from the facts in evidence.'" Gianquitti, 973 A.2d at 592-93 (quoting Seide, 875 A.2d at 1268-69) (quotation marks omitted).

[4] The phrase, "friable asbestos," means "any material that contains asbestos and when crushed or pulverized by the application of pressure releases long, thin, durable fibers into the air that when inhaled can cause tissue damage in the lungs." State v. Hair, 784 So. 2d 1269, 1271-72 (La. 2001); see U.S. v. Owens Contracting Services, Inc., 884 F. Supp. 1095, 1104 (E.D. Mich. 1994) (defining "friable asbestos" as "any material containing more than 1 percent asbestos by weight that hand pressure can crumble, pulverize, or reduce to powder when dry").

The "defendant-specific-dosage-plus-substantial-factor" test of Flores contravenes these principles because it requires plaintiffs to show direct evidence of "the approximate quantum of [the defendant's] fibers to which [the plaintiff] was exposed, and whether this [exposure] sufficiently contributed to the aggregate dose of asbestos [the plaintiff] inhaled . . . ." Flores, 232 S.W.3d at 772. This Court finds that such a requirement sets the causation bar too high for plaintiffs. See Gianquitti, 973 A.2d at 592-93 (finding that while the "plaintiffs did not provide direct evidence of causation, but rather, evidence that was circumstantial in nature and that relied on numerous inferences," the "plaintiffs' evidence was sufficient to enable a reasonable jury to conclude that [the defendant's] breach . . . was a proximate cause of [the plaintiffs'] injury"); Skaling, 742 A.2d at 288.

3

The "Frequency, Regularity, Proximity" Test

The most widely utilized causation standard is the "frequency, regularity, proximity" test.[5] See Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156 (4th Cir. 1986). In Lohrmann, the plaintiff dock worker sued nineteen defendant manufacturers, claiming that occupational exposure to their various asbestos-containing products caused his asbestosis. 782 F.2d at 1158. The United States Court of Appeals for the Fourth Circuit discussed the proof problems faced by plaintiffs in asbestos cases,[6] but found that a causation standard in which "the plaintiff . . . [need

[5] Indeed, most federal and state courts, including "Michigan, Massachusetts, New Jersey, Illinois, Pennsylvania, Maryland, Nebraska, and Oklahoma have adopted the test." Slaughter v. Southern Talc Co., 949 F.2d 167, 171 n.3 (5th Cir. 1991); see Holcomb, 289 P.3d at 195 (collecting cases and finding that the "frequency, regularity, proximity" test is followed by the majority of federal and state courts).

[6] In particular, the court noted the following pattern:

> "As asbestos litigation has developed over the past decade, most plaintiffs sue every known manufacturer of asbestos products, and

only] present any evidence that a company's asbestos-containing product was at the workplace while the plaintiff was at the workplace" was too favorable a standard. See id. at 1162. In seeking to craft a causation rule which balanced the interests of all parties, the court held that "[t]o support a reasonable inference of substantial causation from circumstantial evidence, there must be evidence of exposure to a specific product on a regular basis over some extended period of time in proximity to where the plaintiff actually worked." Id. at 1162-63. Such a rule "is a de minimus rule since a plaintiff must prove more than a casual or minimum connection with the product." Id. at 1162.

This Court finds that the "frequency, regularity, proximity" test strikes the appropriate balance between "the rights and interests of the manufacturer [and] those of the claimants . . . ." Holcomb, 289 P.3d at 196. It comports with our state's proximate causation jurisprudence because a plaintiff may satisfy the test by presenting expert testimony "show[ing] that the result most probably came from the cause alleged." Almonte, 46 A.3d at 18; see Lohrmann, 782 F.2d at 1163 (explaining that a plaintiff meets the "frequency, regularity, proximity" test when "the inferences raised by the [plaintiff's expert] testimony [are] within the range of reasonable probability so as to connect a defendant's product to the plaintiff's disease process"). Thus, under the test, a plaintiff "need not exclude every other possible cause" of his or her injury and

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> during the course of discovery some of the defendants are dismissed on motions for summary judgment because there has been no evidence of any contact with any of such defendants' asbestos-containing products. Other defendants may be required to go to trial but succeed at the directed verdict stage. Some defendants settle prior to trial, and these are usually the defendants whose products have been most frequently identified by the plaintiff and his witnesses as having been used by the plaintiff or by others in his presence or working near him."

Lohrmann, 782 F.2d at 1162.

need only present evidence sufficient to base a finding of causation "on reasonable inferences drawn from the facts . . . ." Gianquitti, 973 A.2d at 593 (quoting Seide, 875 A.2d at 1268-69) (quotation marks omitted); see Lohrmann, 782 F.2d at 1163; Spaur, 510 N.W.2d at 859. This Court, therefore, will apply the "frequency, regularity, proximity" test as the proper causation standard for asbestos cases in Rhode Island. See Liberty Mutual Ins. Co., 603 A.2d at 303.

III

Analysis

A

Satisfying the "Frequency, Regularity, Proximity" Test

To satisfy the "frequency, regularity, proximity" test, plaintiffs must present evidence showing "(1) exposure to a particular product; (2) on a regular basis; (3) over an extended period of time; and (4) in proximity to where the plaintiff actually worked." Chavers v. General Motors Corp., 79 S.W.3d 361, 368 (Ark. 2002); see Lohrmann, 782 F.2d at 1162-63. Such evidence may be direct or circumstantial in nature. See Nolan v. Weil-McLain, 910 N.E.2d 549, 558-59 (Ill. 2009); Spaur, 510 N.W.2d at 861. "[M]ere proof that the plaintiff and a certain asbestos product are at [the same location] at the same time, without more, does not prove exposure to that product." Lohrmann, 782 F.2d at 1162; see Tragarz, 980 F.2d at 418 (recognizing that "without . . . evidence [showing more than the concurrent existence of asbestos and a worker at a particular site,] there would . . . be no proof of proximity and no proof of probable exposure").

Instead, competent sources of proof include evidence "show[ing] that [the plaintiff] worked with, or in close proximity to, [the] defendant's asbestos products." Welch v. Keene Corp., 575 N.E.2d 766, 769 (Mass. App. 1991); Tragarz v. Keene Corp., 980 F.2d 411, 418 (7th Cir. 1992). For example, in Spaur v. Owens-Corning Fiberglas Corp., 510 N.W.2d 854 (Iowa

1994), the Supreme Court of Iowa found that the plaintiff's testimony that he spent over twenty years working in direct contact with asbestos-containing insulation was sufficient to satisfy the "frequency, regularity, proximity" test. See Spaur, 510 N.W.2d at 860. "A plaintiff may also demonstrate exposure to a specific product through testimony of coworkers who can identify him as working with or around these products." Welch, 575 N.E.2d at 769; Tragarz, 980 F.2d at 418; see Spaur, 510 N.W.2d at 860. Furthermore, a "plaintiff can rely on circumstantial evidence that the plaintiff worked in proximity to someone who remembers using the defendant's product." Tragarz, 980 F.2d at 418; see Spaur, 510 N.W.2d at 860 (finding the testimony from asbestos insulators, that the plaintiff monitored steam boilers while the insulators insulated the boilers' pipes with the defendant's asbestos cloth, contained probative circumstantial evidence).

The "frequency, regularity, and proximity test is not a rigid test with an absolute threshold level necessary to support a jury verdict," however. Tragarz, 980 F.2d at 420; see Spaur, 510 N.W.2d at 859. "[T]he [three] factors [of the test] should be 'tailored to the facts and circumstances of the [particular] case'" at hand. Holcomb, 289 P.3d at 196 (quoting Gregg v. V-J Auto Parts, Co., 943 A.2d 216, 225 (Pa. 2007)). In cases in which the plaintiff presents direct evidence of exposure to a particular product over a period of time, for example, "the test has somewhat diminished importance . . ." because such evidence relieves the trier of fact from the need to infer probability of exposure from disparate sources of proof. Tragarz, 980 F.2d at 420-21; see Holcomb, 289 P.3d at 196-97; Gregg, 943 A.2d at 225-26. Similarly, in cases alleging that the plaintiff developed mesothelioma as a result of exposure to a particular defendant's product, meeting "the frequency and regularity prongs become[s] 'somewhat less cumbersome'" for plaintiffs because medical evidence has established that mesothelioma can develop from less intense exposures to asbestos than other asbestos-related diseases, such as asbestosis. Gregg, 943

A.2d at 225 (quoting Tragarz, 980 F.2d at 420); see Holcomb, 289 P.3d at 196. When applying the "frequency, regularity, proximity" test, then, courts must "make a reasoned assessment concerning whether, in light of the evidence concerning frequency, regularity, and proximity of a plaintiff's/decedent's asserted exposure, a jury would be entitled to make the necessary inference of a sufficient causal connection between the defendant's product and the asserted injury." Gregg, 943 A.2d at 227; see Lohrmann, 782 F.2d at 1162-63.

B

"Each and Every Exposure" Evidence

Defendant argues that evidence that "each and every exposure" to asbestos is harmful and contributes to the development of disease is legally insufficient to prove causation because it allows the trier of fact to consider evidence of low-dose and even negligible exposure as a substantial cause. The probative value of such evidence, Defendant contends, is outweighed by the danger of misleading or confusing the trier of fact. Defendant asserts that "each and every exposure" evidence is also scientifically invalid because such evidence relies on novel theories that are not supported by affirmative scientific findings or valid reasoning. Defendant maintains that if the theories underlying this evidence were subjected to the scrutiny of the Daubert hearing in DiPetrillo v. Dow Chemical Corp., 729 A.2d 677 (R.I. 1999), the evidence would be deemed inadmissible at trial.

Plaintiff contends that Defendant's argument is "essentially moot" because Sweredoski suffered prolonged, substantial exposure to the asbestos in Defendant's valves while serving on the Independence, not intermittent, low-dose exposure. Thus, Plaintiff avers, she intends to present direct and circumstantial evidence showing that Sweredoski was exposed to only high levels of asbestos dust when working on Defendant's valves. Plaintiff argues more generally

that it is well-settled within the scientific community that all exposures to asbestos are unsafe and shorten the latency period of asbestos-related diseases. She asserts that, therefore, "each and every exposure" evidence may be used to prove causation in mesothelioma cases because such evidence shows that cumulative exposure to a particular asbestos-containing product is a substantial factor in bringing about the disease.

1

Scientifically Valid

There is little dispute that "asbestos fibers are intrinsically dangerous and that the respiration of each fiber is cumulatively harmful . . . ." John Crane, Inc. v. Wommack, 489 S.E.2d 527, 531 (Ga. App. 1997); see CertainTeed Corp. v. Dexter, 330 S.W.3d 64, 77-78 (Ky. 2010) (finding that medical evidence shows that "the more exposure you have [to asbestos], the more likely you are to get [asbestos-related] disease"). This is especially true in mesothelioma cases because "mesothelioma can result from [cumulative] minor exposures to asbestos products." Tragarz, 980 F.2d at 421; see Wilbur, 476 N.W.2d at 75 (noting that "mesothelioma is a long-latency disease caused by cumulative exposure to asbestos fibers"); Wagner v. Bondex Int'l, Inc., 368 S.W.3d 340, 352 (Mo. App. 2012). This Court is thus satisfied that "each and every exposure" to asbestos is cumulatively harmful to humans, and finds no need to hold a hearing to establish the scientific validity of such a theory in Rhode Island. See DiPetrillo, 729 A.2d at 688 (holding that when the scientific theories underlying a party's expert's testimony are not novel, the party need not establish a foundation for that testimony prior to trial). Instead, once expert evidence is found to be scientifically valid, "the expert's testimony should be put to the trier of fact to determine how much weight to accord to the evidence"). See id. at 689-90; see also R.I. R. Evid. 402.

2

Legally Insufficient

Nonetheless, in asbestos cases "'the substantial factor [element of causation] is not concerned with the quantity of the injury-producing agent or force but rather with its legal significance.'" Tragarz, 980 F.2d at 421 (quoting Wehmeier v. UNR Industries, Inc., 572 N.E.2d 341, 343-44 (Ill. App. 1991)) (emphasis in original). The three prongs of the "frequency, regularity, proximity" test are meant to "distinguish between a 'substantial factor,' tending along with other factors to produce the plaintiff's disease and death, and a negligible factor, so slight or so tangential to the harm caused that, even when combined with other factors, it could not reasonably be said to have contributed to the result." O'Connor v. Raymark Industries, Inc., 518 N.E.2d 510, 513 (Mass. 1988); see Gregg, 943 A.2d at 225. Accordingly, "courts that adopt the three-factor test of frequency, regularity, and proximity regularly reject the 'any' exposure argument," standing alone, as legally insufficient to prove proximate causation. Holcomb, 289 P.3d at 198; see Chavers, 79 S.W.3d at 563-64.

On one hand, evidence that "each and every exposure" to the defendant's product caused the plaintiff's harm, regardless of the intensity of such exposure, necessarily fails to satisfy the "frequency" and "regularity" prongs of the "frequency, regularity, proximity" test. See Lohrmann, 782 F.2d at 1163 (finding that evidence that the plaintiff was exposed to the defendant's product "on ten to fifteen occasions of between one and eight hours duration . . . was not sufficient to raise a permissible inference that such exposure was a substantial factor in the development of his [disease]"); Chavers, 79 S.W.3d at 563-64 (determining that the plaintiff's evidence of one-time exposure to the defendant's product failed to satisfy the "frequency" and "regularity" prongs of the test because such evidence could not show "that it was probable that

[the plaintiff's single] exposure to the asbestos-containing product caused his illness"). This is true even in mesothelioma cases, despite medical evidence demonstrating that "minor," cumulative exposures to asbestos can cause the disease, because evidence showing only that "each and every exposure" caused the plaintiff's injury establishes, at best, the possibility that such exposure was a substantial factor in bringing about the alleged harm. See Gregg, 943 A.2d at 226-27; Chavers, 79 S.W.3d at 563-64. Our Supreme Court's general proximate causation jurisprudence, by contrast, requires plaintiffs to prove that "'the result most probably came from the cause alleged.'" Almonte, 46 A.3d at 18 (quoting Perry, 890 A.2d at 468); see Gianquitti, 973 A.2d at 592-93; Wells, 635 A.2d at 1191 (emphasis added).

At the same time, allowing plaintiffs to present evidence that "each and every exposure" to asbestos, "no matter how minimal . . . , implicates a fact issue concerning substantial factor-causation . . . [would] subject defendants to . . . liability for injuries . . . in the absence of any [evidence] that would support the conclusion that the product sold by the defendant was a substantial factor in causing the harm." Gregg, 943 A.2d at 226-27; see Georgia-Pacific Corp. v. Bostic, 320 S.W.3d 588, 597-99 (Tex. App. 2010). To hold otherwise would permit plaintiffs to circumvent the requirement that they prove that the alleged harm would not have occurred "but-for" a defendant's actions, and would place an unfair burden on defendants to litigate tenuous claims. See Almonte, 46 A.3d at 18; Skaling, 742 A.2d at 288. Therefore, this Court finds that evidence that a plaintiff's injury was caused by "each and every exposure" to a defendant's asbestos-containing product—without a more specific showing of the "frequency, regularity, and proximity" of such exposure—is legally insufficient to establish proximate causation. See Holcomb, 289 P.3d at 196-97; Gregg, 943 A.2d at 225-27.

IV

Conclusion

Based on the foregoing, this Court finds that the "frequency, regularity, proximity" test is the proper standard for proving causation in asbestos cases in this state. This test comports with our Supreme Court's general causation jurisprudence and fairly balances the interests of plaintiffs and defendants. To meet the test, a plaintiff must present competent evidence demonstrating exposure to a particular defendant's product, on a regular basis, over an extended period of time, and in proximity to where the plaintiff worked. While a plaintiff may present "each and every exposure" evidence at trial to establish the inherent dangers of breathing in asbestos, such evidence will not satisfy the causation standard adopted here unless it is accompanied by sufficient evidence of the "frequency, regularity, and proximity" of the plaintiff's exposure to asbestos to establish that such exposure was a substantial factor in bringing about the plaintiff's injury. Accordingly, Defendant's Motion is denied.

Counsel shall submit the appropriate order for entry.

RHODE ISLAND SUPERIOR COURT

Decision Addendum Sheet

TITLE OF CASE:	Sweredoski v. Alfa Laval, Inc., et al.
CASE NO:	PC 2011-1544
COURT:	Providence County Superior Court
DATE DECISION FILED:	June 13, 2013
JUSTICE/MAGISTRATE:	Presiding Justice Alice Bridget Gibney
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