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IN THE DISTRICT COURT OF APPEAL OF FLORIDA
FOURTH DISTRICT

MOBIL CORPORATION,

Appellant,

v.

GEORGE W. JOHNSON,

Appellee.
_____/

Case No. 14-0144

L.T. Case No. 00-10830
(17th Jud. Cir.)

AMICI CURIAE BRIEF OF ASSOCIATED INDUSTRIES OF FLORIDA, FLORIDA JUSTICE REFORM INSTITUTE, FLORIDA INSURANCE COUNCIL, AMERICAN TORT REFORM ASSOCIATION, NFIB SMALL BUSINESS LEGAL CENTER, CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA, NATIONAL ASSOCIATION OF MANUFACTURERS, AMERICAN INSURANCE ASSOCIATION, AND COALITION FOR LITIGATION JUSTICE, INC. IN SUPPORT OF APPELLANT

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Fed. Jud. Ctr., *Reference Manual on Scientific Evidence, Reference Guide on Toxicology* (2d ed. 2000) ..... *passim*

Michael Green, *Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of the Agent Orange and Bendectin Litigation*, 86 NW. U. L. Rev. 643 (1992) 3

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INTEREST OF *AMICI CURIAE*

This appeal involves the intersection of science and law with respect to what is believed to be the first case to be tried of the thousands of asbestos cases that have been pending in the Florida courts for over a decade and that involve plaintiffs with little or no present physical impairment.

As associations that represent civil defendants in Florida and their insurers, *amici* file this brief to utilize their broad perspective to educate the Court about the importance of assessing dose with regard to establishing causation in toxic tort cases, including asbestos cases. *Amici* are concerned that Plaintiff obtained a judgment below despite his failure to present reliable evidence that he was exposed to a sufficient dose of the Appellant's Hi-Heat Dum Dum product to cause his benign (non-cancerous) pleural plaque condition.

If courts permit liability to be imposed, as here, without requiring plaintiffs to show that they have received a sufficient dose of a defendant's product to cause the condition alleged, and that they developed the condition as a result of that exposure, then there is a substantial risk that defendants in the countless pending Florida asbestos cases – as well as defendants in other toxic tort cases – could be held liable for conditions they did not cause and were not shown to have caused. *Amici*'s members would be adversely impacted if the trial court's permissive approach to establishing causation is permitted to take root in Florida.

STATEMENT OF CASE AND FACTS

Amici adopt Appellant's Statement of Case and Facts as relevant to our argument.

SUMMARY OF ARGUMENT

A critical element of any latent injury case is a determination of the dose received by the plaintiff regarding the defendant's product, and a finding that the dose was sufficient to cause, and did cause, the plaintiff's alleged condition. This is true whether the exposure at issue involves asbestos (as here), consumer products, chemicals, pharmaceuticals, or any other potentially harmful material.

ARGUMENT

I. IT IS FUNDAMENTAL TORT LAW THAT A PLAINTIFF MUST SHOW A SUFFICIENT LEVEL OF EXPOSURE TO THE DEFENDANT'S PRODUCT TO ESTABLISH CAUSATION

"American courts have reached a broad consensus on what a plaintiff must show to prove causation in a toxic tort case," according to Professor David E. Bernstein, co-author of the leading treatise, *The New Wigmore: Expert Evidence* (Aspen L. & Bus. 2004). David E. Bernstein, *Getting to Causation in Toxic Tort Cases*, 74 Brook. L. Rev. 51, 52 (2008). Professor Bernstein explains:

> First, a plaintiff must show that the substance in question is capable of causing the injury in question. This is known as "general causation." Second, a plaintiff must show that this substance caused *his* injury. This is known as "specific causation…." [T]he focus of inquiry in toxic tort cases typically is on the existence of specific causation.

Id. at 52-53.

> Proof of specific causation has two elements. The plaintiff must initially show that the *level of the toxin* he was exposed to *can* cause the illness he contracted…. [Additionally], a plaintiff has the burden to present evidence, epidemiological or otherwise, 'from which a reasonable person could conclude that a defendant's emission has *probably* caused the [plaintiff] the kind of harm of which he or she complains."

Id. at 53-55 (emphasis in original) (quoting *Parker v. Mobil Oil Corp.*, 857 N.E.2d 1114, 1121 (N.Y. 2006), quoting *Wright v. Willamette Indus., Inc.*, 91 F.3d 1105, 1107 (8th Cir. 1996)).[1]

A. Proof of Dose is Critical to Establishing Causation

The critical role that dose plays in determining the cause of a harm dates all the way back to the sixteenth century, when the "father of toxicology," Paracelsus, first articulated the "fundamental tenet" of toxicology that "the dose makes the poison." Fed. Jud. Ctr., *Reference Manual on Scientific Evidence, Reference Guide on Toxicology* 403 (2d ed. 2000). "Dose is the single most important factor to consider in evaluating whether an alleged exposure caused a specific adverse effect." David L. Eaton, *Scientific Judgment and Toxic Torts – A Primer In Toxicology For Judges and Lawyers*, 12 J.L. & Pol'y 5, 11 (2003).

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[1] *See also* Bert Black, *Epidemiologic Proof in Toxic Tort Litigation*, 52 Fordham L. Rev. 732, 736 (1984) ("[E]pidemiology is the only generally accepted scientific discipline…to identify and establish the causes of human diseases."); Michael Green, *Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of the Agent Orange and Bendectin Litigation*, 86 NW. U. L. Rev. 643, 646 (1992) (epidemiology is universally recognized as the "most desirable evidence" for assessing causation in the science of toxicology).

As Florida courts have recognized, "even water if consumed in large enough quantities can be toxic." *Berry v. CSX Transp., Inc.*, 709 So. 2d 552, 559 (1st DCA), *review denied*, 718 So. 2d 167 (Fla. 1998). Aspirin, sunlight, certain vitamins, and countless other substances are similarly not harmful – and, in fact, may be beneficial – at low doses, but can cause harm at high doses. *See* Richard J. Pierce, *Causation in Government Regulation & Toxic Torts*, 76 Wash. U.L.Q. 1307, 1315-16 (1998) (stating that carcinogens are found in everyday items such as "wine, beer, lettuce, root beer, apples, mushrooms, pears, plums, peanut butter, tea, celery, carrots, bread, and chlorinated water").

Thus, courts routinely require plaintiffs to demonstrate not just some exposure, but "evidence from which the trier of fact could conclude that the plaintiff was exposed to levels of toxins *sufficient to cause the harm complained of*." *Wintz v. Northrop Corp.*, 110 F.3d 508, 513 (7th Cir. 1997) (citing Fed. Jud. Ctr., *Reference Manual on Scientific Evidence*) (emphasis added); *see also Daly v. Arvinmeritor, Inc*., 2009 WL 4662280 (Fla. Cir. Ct. Broward Cnty. Nov. 30, 2009).

"[D]ose matters," *In re Bextra & Celebrex Marketing Sales Practices & Prod. Liab. Litig.*, 524 F. Supp. 2d 1166, 1174 (N.D. Cal. 2007), because the human body is capable of defending itself against an array of daily exposures to known toxins. *See* Eaton, *supra*, at 13. Disease results only when those exposures

reach a "threshold" level that overwhelms our natural defenses. This principle holds true for carcinogens such as asbestos as it does for any toxin:

> Most chemicals that have been identified to have "cancer-causing" potential (carcinogens) do so only following long-term, repeated exposure for many years. Single exposures or even repeated exposures for relatively short periods of time (*e.g.*, weeks or months) generally have little effect on the risk of cancer, unless the exposure was remarkably high and associated with other toxic effects.

Id. at 9. This is why nuclear fallout may cause cancer, but not an ordinary x-ray.

With respect to asbestos, it is known that we are exposed virtually our entire lives. These exposures – from naturally occurring asbestos as well as dispersed industrial and building uses – can easily accumulate to millions of fibers inhaled over our lifetimes. *See In re Toxic Substances Cases*, 2006 WL 2404008, at *3 (Pa. Ct. Com. Pl. Aug. 17, 2006). Yet, these low level exposures are not considered dangerous.

In the instant case, Plaintiff failed to introduce evidence that his handling of Mobil's encapsulated Dum Dum asbestos product resulted in a dose of respirable fibers that was capable of causing his pleural plaques. To the contrary, both a memorandum introduced by Plaintiff and Defendant's expert showed that the exposures were below background levels.

B. Defendant-Specific Evidence of Dose Is Routinely Required in All Types of Toxic Tort Cases

Courts in all types of toxic tort cases have repeatedly held that a plaintiff must offer proof of an actual toxic dose with respect to the defendant's product to prevail in a tort case. *See, e.g., White v. Dow Chem. Co*., 2007 WL 6948824, *5 (S.D. W. Va. Nov. 29, 2007) (case law "throughout" the country requires plaintiffs to "prove the levels of exposure that are hazardous to human beings generally as well as the plaintiff's actual level of exposure to the defendant's toxic substance before he or she may recover.") (quoting *McClain v. Metabolife Int'l, Inc*., 401 F.3d 1233, 1241 (11th Cir. 2005)), *aff'd*, 321 F. App'x 266 (4th Cir. 2009); *Bland v. Verizon Wireless, (VAW) L.L.C*., 538 F.3d 893, 898 (8th Cir. 2008) (expert was properly excluded where expert lacked knowledge of the level of Freon exposure which creates an appreciable risk of causing asthma and the specific concentration and degree of plaintiff's Freon exposure).[2]

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[2] *See also Mitchell v. Gencorp., Inc*., 165 F.3d 778, 781 (10th Cir. 1999) ("[A] plaintiff must demonstrate the levels of exposure that are hazardous to human beings generally as well as the plaintiff's actual level of exposure to the defendant's toxic substance before he or she may recover."); *Moore v. Ashland Chem., Inc*., 151 F.3d 269, 278 (5th Cir. 1998) ("Because he had no accurate information on the level of [Plaintiff's] exposure … [Plaintiff's expert] necessarily had no support for the theory that the level of chemicals to which [Plaintiff] was exposed caused [his harm]."), *cert. denied*, 526 U.S. 1064 (1999); *Abuan v. General Elec. Co.*, 3 F.3d 329, 332-34 (9th Cir. 1993) (in toxic substances cases, "it is essential that the plaintiff demonstrate that she was, in fact, *exposed to harmful levels* of such substances.") (citation and quotation omitted) (emphasis in original), *cert. denied*, 510 U.S. 1116 (U.S. 1994).

Indeed, this Court has recognized that "the plaintiff is required to show sufficient exposure to asbestos products sold or manufactured by the... defendants." *Reaves v. Armstrong World Indus., Inc.*, 569 So. 2d 1307, 1308 (4th DCA 1990), *review denied*, 581 So. 2d 166 (Fla. 1991). This showing includes "how often the products were used on the job sites, and *the toxicity of those products as they were used*." *Lagueux v. Union Carbide Corp.*, 861 So. 2d 87, 88 (4th DCA), *review denied*, 871 So. 2d 875 (Fla. 2004) (emphasis added) (citation omitted). Below we offer a number of examples to demonstrate that the dose principle is widely accepted by courts in all types of toxic tort settings.

1. Example: Asbestos

The Texas Supreme Court in *Georgia-Pacific Corp. v. Bostic*, -- S.W.3d --, 2014 WL 3797159 (Tex. July 11, 2014), an asbestos case, held that "[p]roof of substantial factor causation requires some quantification of the dose." *Id.* at *16. The court explained, "[I[f we were to adopt a less demanding standard . . . the result essentially would be not just strict liability but absolute liability against any company whose asbestos-containing product crossed paths with the plaintiff throughout his entire lifetime." *Id.* at *3. The court continued that it has "never embraced the concept of industry-wide liability on grounds that proof of causation might be difficult." *Id.* Rather, the court has "rejected such thinking and held firm to the principle that liability in tort must be based on proof of causation." *Id*; *see*

also Celotex Corp. v. Copeland, 471 So. 2d 533 (Fla. 1985) (rejecting industry-wide liability in Florida).

Likewise, the Virginia Supreme Court in *Ford Motor Co. v. Boomer*, 736 S.E.2d 724 (Va. 2013), another asbestos case, recently held that "experts must opine as to what level of exposure is sufficient to cause [disease], and whether the levels of exposure at issue in this case were sufficient." *Id.* at 733.

The need to connect defendant-specific dose to the plaintiff's disease was echoed by the Pennsylvania Supreme Court in *Gregg v. V-J Auto Parts Co.*, 943 A.2d 216 (Pa. 2007). The court explained that ignoring whether and how specific exposures caused an injury would "subject defendants to full . . . liability for injuries and fatalities in the absence of any reasonably developed scientific reasoning that would support the conclusion that the product sold by the defendant was a substantial factor in causing the harm." *Id.* at 227.[3]

[3] *See also Moeller v. Garlock Sealing Techs., LLC*, 660 F.3d 950, 955 (6th Cir. 2011) ("Given that the Plaintiff failed to quantify [his] exposure to asbestos from [defendant's] gaskets and that the Plaintiff concedes that [he] sustained massive exposure to asbestos from [other] sources, there is simply insufficient evidence to infer that [defendant's] gaskets probably, as opposed to possibly, were a substantial cause of [plaintiff's] mesothelioma."); *Martin v. Cincinnati Gas & Elec. Co.*, 561 F.3d 439, 443 (6th Cir. 2009) (rejecting causation testimony that "would make every incidental exposure to asbestos a substantial factor"); *Wannall v. Honeywell Int'l, Inc.*, 292 F.R.D. 26, 43 (D.D.C. 2013) ("[A]n expert may not simply take the level of asbestos exposure of a particular plaintiff and opine that such exposure was sufficient to cause the plaintiff's mesothelioma.").

2. Example: Benzene

New York's highest court in *Parker v. Mobil Oil Corp.*, 857 N.E.2d 1114 (N.Y. 2006), rejected expert testimony that a gas station attendant's exposures to benzene from pumping gasoline were "substantial" or "significant," and a cause of the plaintiff's leukemia. Plaintiff sought to rely on studies showing an increased risk of leukemia among refinery workers exposed to benzene to "prove the causal connection between [his] exposure to benzene in *gasoline*." *Id.* at 1119 (emphasis in original). The court found that this comparison and the lack of any study suggesting an increased risk of leukemia from exposure to benzene in gasoline was "plainly insufficient to establish causation." *Id.* at 1121. The court further noted that plaintiff's experts failed to make any actual dose calculation in which to base causation. *See id.* at 1122.[4]

3. Example: Polychlorinated Biphenyls (PCBs)

In a PCB exposure case, *Nelson v. Tennessee Gas Pipeline Co*., 243 F.3d 244 (6th Cir.), *cert. denied*, 534 U.S. 822 (2001), the U.S. Court of Appeals for the

[4] *See also Pluck v. B.P. Oil Pipeline Co.*, 640 F.3d 671, 676-77 (6th Cir. 2011) ("In a toxic-tort case…the plaintiff must establish both general and specific causation through proof that the toxic substance is capable of causing, and did cause, the plaintiff's alleged injury."); *Wills v. Amerada Hess Corp.*, 379 F.3d 32, 49 (2d Cir. 2004) (finding expert testimony in benzene exposure case "insufficient to establish that decedent had been exposed to a harmful amount of toxins or that such exposure caused his cancer"), *cert. denied*, 546 U.S. 822 (2005); *Henricksen v. ConocoPhillips*, 605 F. Supp. 2d 1142, 1162 (E.D. Wash. 2009) (excluding causation testimony that "did not attempt to quantify dose or even estimate [plaintiff's] level of exposure to benzene").

Sixth Circuit similarly excluded an expert who "made no attempt to determine what amount of PCB exposure" the plaintiffs received from the release of PCBs from a natural gas pipeline. *Id*. at 252. The plaintiffs' expert simply opined that "because PCBs were present in the environment in excess of allowable limits and plaintiffs lived and worked in the area, they must have been exposed at a level that could cause neurological and lung impairments." *Id.* at 252-53. The court explained that this theory was "not scientifically valid" because "an association does not mean there is a cause and effect relationship." *Id.* at 253 (citing Fed. Jud. Ctr., *Reference Manual on Scientific Evidence*, *supra*, at 333, 348).

4. <u>Example: Pharmaceuticals</u>

In a pharmaceutical case involving the inclusion of ephedrine in a diet drug supplement, the U.S. Court of Appeals for the Eleventh Circuit in *McClain v. Metabolife Int'l, Inc.*, 401 F.3d 1233 (11th Cir. 2005), excluded a plaintiffs' causation expert whose testimony "neglect[ed] the hallmark of the science of toxic torts—the dose-response relationship." *Id.* at 1240. The expert "offered no testimony about the dose . . . required to injure Plaintiffs or anyone else." *Id.* at 1241. The court instructed trial judges that "[w]hen analyzing an expert's methodology in toxic tort cases, the court should pay careful attention to the expert's testimony about the dose-response relationship." *Id.* "A reliable methodology," the court continued, "should take into account the background risk"

and compare that risk to the level of exposure alleged in the case. *Id.* at 1243. "In toxic tort cases," the court concluded, "'[s]cientific knowledge of the harmful level of exposure to a chemical, plus knowledge that [the] plaintiff was exposed to such quantities, are *minimal* facts necessary to sustain the plaintiff's burden….'" *Id.* (emphasis added) (quoting *Allen v. Pa. Eng'g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996)).[5]

5. Example: Diacetyl (Popcorn Flavoring)

In *Newkirk v. ConAgra Foods, Inc.*, 727 F. Supp. 2d 1006 (E.D. Wash. 2010), *aff'd*, 438 F. App'x 607 (9th Cir. 2011), the court found that plaintiff failed to establish a causal connection between his alleged exposures to diacetyl in butter flavoring as a result of popping microwave popcorn and his lung disease. The court determined that the plaintiff's experts could not rely on scientific studies of diacetyl exposure from certain workers at a microwave popcorn plant to support causation arguments for lower dose household exposures, such as opening a bag of popcorn. *See id.* at 1017. The court additionally rejected the findings of plaintiff's

[5] *See also In re Denture Cream Prods. Liab. Litig.*, 795 F. Supp. 2d 1345, 1352 (S.D. Fla. 2011) (excluding proposed testimony of zinc expert that very large amounts of denture adhesive cream applied to dentures several times a day for many years can cause copper-deficiency spinal cord harm since the dose-response relationship studies the expert relied upon failed to establish what dose of zinc placed individuals into negative copper balances or length of exposure necessary to cause neurological symptoms); *Guinn v. AstaZeneca Pharms. LP*, 602 F.3d 1245, 1255 (11th Cir. 2010) ("An expert…cannot merely conclude that all risk factors for a disease are substantial contributing factors in its development.").

experts because they failed to establish "any parameters as to what a safe or unsafe level of exposure would be." *Id.* at 1031.

As these many examples demonstrate, a requirement that a plaintiff's expert consider the dose received by a plaintiff with respect to the defendant's product, and show that the dose was sufficient to cause, and did cause the condition at issue, is fundamental and applied across the broad spectrum of toxic tort litigation.[6]

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[6] *See also Exxon Mobil Corp. v. Albright*, 71 A.3d 30, 84 (Md.) (plaintiff "must present expert testimony quantifying his or her risk of developing a latent disease"), *cert. denied*, 134 S. Ct. 648 (2013); *Nat'l Bank of Commerce of El Dorado v. Associated Mike Producers, Inc.*, 191 F.3d 858, 864 (8th Cir. 1999) ("plaintiffs' experts have no scientific knowledge or information as to the level of [aflatoxin] exposure that would subject a person who breathes in an aersolized milk containing [aflatoxin] to an appreciable risk of laryngeal cancer"); *Cano v. Everest Minerals Corp.*, 362 F. Supp. 2d 814, 848 (W.D. Tex. 2005) ("[The law] require[s] more of an expert witness than simply saying that [a minuscule dose] of radiation was a substantial contributing factor…given that we are all exposed to radiation daily, yet most people do not get cancer."); *Cartwright v. Home Depot U.S.A., Inc.*, 936 F. Supp. 900, 904 (M.D. Fla. 1996) (excluding causation testimony in latex paint exposure case where "[n]either expert made any effort to ascertain or even approximate what level of exposure to irritants was created by Plaintiffs' described use of the paints"); *Whiting v. Boston Edison Co.*, 891 F. Supp. 12, 13 (D. Mass. 1995) (rejecting causation testimony in radiation exposure case that "[i]n layman's terms…assumes that if a lot of something is bad for you, a little of the same thing, while perhaps not equally bad, must be so in some degree"); *Richardson v. Union Pac. R.R. Co.*, 386 S.W.3d 77, 79 (Ark. Ct. App. 2011) (holding in a diesel fumes case that "causation requires more than mere proof of exposure to above-ambient levels of the alleged toxin, and instead requires evidence of the levels of exposure that are hazardous to human beings generally, as well as the plaintiff's actual level of exposure to the defendant's toxic").

C. Establishing Dose in Asbestos Litigation Is Especially Important Given the Variety of Potential Exposures

The concept of dose is particularly important in asbestos cases because courts have "acknowledged that asbestos-containing products are not uniformly dangerous." *Becker v. Baron Bros., Coliseum Auto Parts, Inc*., 649 A.2d 613, 620 (N.J. 1994); *see also Gideon v. Johns-Manville Sales Corp.*, 761 F.2d 1129, 1145 (5th Cir. 1985) ("[A]sbestos-containing products cannot be lumped together in determining their dangerousness."). Rather, asbestos products "have widely divergent toxicities, with some asbestos products presenting a much greater risk of harm than others." *Copeland*, 471 So. 2d at 538.

For example, "it is generally accepted in the scientific community and among government regulators that amphibole fibers are more carcinogenic than serpentine (chrysotile) fibers." *In re Asbestos Litig.*, 911 A.2d 1176, 1181 (Del. Super. May 9, 2006), *cert. denied*, 2006 WL 1579782 (Del. Super. June 7, 2006), *appeal refused*, 906 A.2d 806 (Del. Super. June 13, 2006); *see also Bartel v. John Crane, Inc*., 316 F. Supp. 2d 603, 605 (N.D. Ohio 2004) ("While there is debate in the medical community over whether chrysotile asbestos is carcinogenic, it is generally accepted that it takes a far greater exposure to chrysotile fibers than to amphibole fibers to cause mesothelioma."), *aff'd sub nom. Lindstrom v. A-C Prod. Liab. Trust*, 424 F.3d 488 (6th Cir. 2005).

Furthermore, juries in asbestos cases may be particularly willing to go along with a plaintiff's suggestion that if there was some asbestos exposure, it must have caused the plaintiff's injury. Ads by plaintiffs' lawyers run regularly on Florida TV about asbestos exposure– in fact, Plaintiff testified that he sees these ads and they cause him to be afraid. (T 357). Courts should not allow such generalized fears to drive trial results; they should require reliable evidence of causation.

CONCLUSION

The Court should reverse the judgment below and hold that a plaintiff in a toxic tort case, including an asbestos case, must present evidence that the plaintiff was sufficiently exposed to the defendant's product to cause the condition alleged, and that the plaintiff developed the condition as a result of that exposure.

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Dated: October 17, 2014

CERTIFICATE OF COMPLIANCE WITH RULE 9.210

I hereby certify the foregoing Brief is submitted in Times New Roman 14-point font and complies with the font requirements of Florida Rule of Appellate Procedure Rule 9.210(a)(2).

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CERTIFICATE OF SERVICE

I certify the foregoing Brief was filed electronically on October 17, 2014, in compliance with the Florida Rules of Administration and has been served via e-mail to the following:

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