

Invalidating 'Every Exposure' Theory

Law360, New York (July 8, 2011) -- Plaintiffs in mesothelioma cases typically sue numerous defendants alleging that asbestos attributable to each contributed to causing the fatal cancer. To support casting their net to include defendants to whose products plaintiffs had only de minimus exposures, plaintiffs' experts regularly opine that each and every exposure to asbestos above levels found in the ambient "background" air is a substantial factor in causing the disease.

This expansive theory of causation was first proffered in asbestosis cases in the early 1970s and has become a principal driver in what the U.S. Supreme Court has described as the "elephantine mass" of asbestos litigation in the United States. It does so by allowing plaintiffs to maintain a claim against any defendant based on the plaintiffs' and/or coworkers' recollections, usually decades old, that the plaintiff worked with or around the defendant's asbestos product without quantifying the exposure from the product or the risk that exposure created in causing the plaintiff's disease.

The theory also permits plaintiffs to sidestep completely the lack of medical and epidemiologic proof linking low asbestos exposures with disease as well as the great weight of scientific evidence regarding mesothelioma pathogenesis, including the overwhelming consensus in the scientific community that different asbestos fiber types and sizes have markedly different carcinogenicities.

Even the plaintiff experts who espouse the "each and every exposure" theory concede that the likelihood that any particular asbestos exposure will cause cancer is strongly dependent on the intensity and duration of the exposure, as well as the physical and chemical properties of the asbestos fibers at issue. Yet, when it comes to attributing blame in litigation, these same experts testify that all exposures, regardless of their relative mesotheliogenic potencies or the underlying mechanism of carcinogenesis, are equally and collectively "causal" without providing any scientific evidence in support.

Although plaintiff experts first imported the "every exposure" theory into mesothelioma cases back in the 1980s, it is only within the last several years that courts have begun seriously questioning the scientific validity of this contention. To date, more than a dozen state and federal trial and appellate courts from a variety of jurisdictions, including Texas, Louisiana, Washington, Pennsylvania, Delaware, Mississippi and Ohio, have rejected the theory as either unscientific or inconsistent with state-law causation jurisprudence, and the Pennsylvania Supreme Court is presently considering the issue in *Betz v. Pneumo Abex LLC*, 9 A.2d 1134 (Pa. 2010).

Nevertheless, some courts continue to permit the opinion, including the federal asbestos multidistrict litigation court, which recently upheld a causation claim based on the theory in *Anderson v. Saberhagen Holdings Inc.* (E.D. Pa. Feb. 16, 2011). On June 15, 2011, applying a 2005 Georgia statute implementing the federal Daubert standard in Georgia state courts, the Court of Appeals of Georgia in *Butler v. Union Carbide Corporation* (Ga. App. 2011) joined the line of cases rejecting the theory as unscientific.

The Butler case involved a mesothelioma decedent who had worked at a plastic molding facility from approximately 1965 to 1973. Butler testified that during his career he dumped thousands of bags of phenolic molding compounds, a granular raw plastic material, into preforming machines that compressed the molding compound into pellets of various sizes.

He would then transport these preformed pellets to a mold operator who would place the pellets into the molds to make finished plastic parts, such as handles, for cookware. He identified nine brands of molding compounds he used over his career, including Union Carbide's, although he stated that he used molding compounds from two other manufacturers far more often than the others. He could not say anything about the quantity of Union Carbide molding compounds that he used. He testified that dumping molding compounds into the preform machine generated large clouds of dust that he regularly breathed.

Based solely on this testimony, and representations from plaintiff's counsel that the various molding compounds at issue contained asbestos, plaintiff's pathologist expert, Dr. John Maddox, testified that all of the molding compound exposures contributed to causing Butler's mesothelioma. In reaching this conclusion, Maddox did not determine how much of each molding compound was used, did not determine how much asbestos was present in any particular molding compound and did not conduct any analysis quantifying the exposures from the particular molding compounds.

Nor did Maddox make any effort to quantify the increased risk of disease associated with exposure to asbestos from any particular molding compound, or to determine the relative contribution to Butler's overall risk from any such exposure. In fact, Maddox testified that even if one exposure presented a million times more risk of causing mesothelioma than another, they would both, in his view, still be substantial contributing causal factors. Maddox justified this conclusion with the familiar litany that each and every exposure to asbestos above background levels contributes to causing mesothelioma.

The Trial Court Opinion

After extensive briefing and a one-day Daubert hearing at which Maddox testified, the trial court issued a 21-page opinion striking Maddox's specific causation testimony against Union Carbide. Citing a series of federal cases applying the U.S. Supreme Court's seminal decision on the admissibility expert testimony, *Daubert v. Merrill Dow Pharmaceuticals*, 509 US 579 (1993), the trial court first observed that, to support a specific causation opinion in a toxic tort case with admissible expert testimony, the expert must present "scientific knowledge of the harmful level of exposure to the chemical plus knowledge that plaintiff was exposed to such quantities." *Butler*, at *12.

As the trial court noted, “[i]t is improper for an expert to presume that the plaintiff ‘must have somehow been exposed to a high-enough dose to exceed the threshold [necessary to cause the illness], thereby justifying his initial diagnosis.’ This is circular reasoning.” Id.

The court then analyzed the "each and every exposure" opinion under the four scientific reliability factors set forth by the United States Supreme Court in Daubert: (1) whether the methodology has been and is capable of being tested; (2) whether the methodology has been subjected to peer review; (3) the nature of the error rate associated with the methodology; and (4) whether the methodology is generally accepted within the relevant scientific community. Id. at *8-*9.

Most important to the trial court, it found that Maddox’s every exposure theory flunked the first and third prongs of the inquiry. Id. at *14. In particular, the court found that “Dr. Maddox’s ‘any exposure’ theory is at most, scientifically grounded speculation: an untested and potentially untestable hypothesis.” Id. at *14. Citing 1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* § 1:16 (West 2009-2010 ed.), the court emphasized that “if a statement could not be tested, then it could never achieve the designation ‘science.’” Id. at *11.

As it further noted, citing the Seventh Circuit’s decision in *Rosen v. Ciba Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996): Daubert does not permit experts to speculate about what they concede is not known by use of the scientific method. “[T]he courtroom is not the place for scientific guesswork, even of the inspired sort. Law lags science; it does not lead it.” Id. at *13.

The trial court also held that since the theory had not been tested, it had no known error rate. Id. at *14. While the court observed that the theory had received some reference in the peer reviewed scientific literature, it found that the admitted lack of testability rendered the theory unscientific and should be given more weight in the Daubert analysis, trumping any reliance on ipse dixit statements in the literature. Id. at *15.

The court also observed that Maddox behaved as a “quintessential expert for hire,” thereby justifying a rigorous application of the Daubert reliability factors. Id. at *16. Considering all the evidence before it, the trial court held that Maddox “[had] not properly utilized the scientific method to make scientifically valid decisions in reaching his specific causation opinions as required by Daubert.” Having stricken plaintiff’s specific causation evidence, the trial court then granted summary judgment for Union Carbide.

The Appellate Court’s Decision

The principal issue before the appellate court was whether the trial court had abused its discretion in striking Maddox’s opinion under the Georgia Daubert standard. Validating the trial court’s requirement that specific causation opinions be based on scientific evidence demonstrating that the exposure at issue was above a provable level shown to cause mesothelioma, the court found ample evidence in the record to support the trial court’s conclusion.

First, although Maddox had not conducted any type of exposure analysis specific to Union Carbide, the court noted that Dr. Dennis Paustenbach, Union Carbide’s industrial hygiene and toxicology expert, had

reviewed records of sales of Union Carbide's molding compounds to Butler's employer and testified that Union Carbide asbestos-containing molding compounds (which contained only chrysotile asbestos) constituted less than 1 percent of the total molding compounds used at the facility. *Id.* at *1.

Moreover, at the rate that Butler testified to using molding compounds, he would have handled Union Carbide material (if at all) on less than eight days out of his eight-year career. *Id.* Maddox had neither offered any analysis contrary to Paustenbach's nor identified any study demonstrating that eight days of exposure to chrysotile asbestos would measurably increase the risk of contracting mesothelioma.

In fact, Maddox testified that it would take several weeks of exposure to asbestos from molding compounds — much longer than eight days — before Butler would have been exposed at levels shown to cause disease in studies involving mixed chrysotile and amphibole exposures. *Id.* at *4. As the court of appeals found, “[t]he literature does not support [Maddox’s] specific causation opinion based on the evidence shown in this case.” *Id.*

The court of appeals was also swayed by a recent opinion from the Court of Appeals of Texas in *Smith v. Kelly-Moore Paint Co.*, 307 S.W.2d 829 (Tex. App. 2010), which rejected a similar “each and every exposure” opinion by Maddox in affirming the grant of summary judgment for the defendant. As the Georgia appellate court noted, in *Smith*, just as in *Butler*, Maddox was unable to supply evidence that the plaintiff's exposure to chrysotile asbestos exceeded levels of chrysotile asbestos exposure scientifically shown to cause mesothelioma in humans. *Butler*, at *4.

The *Butler* court specifically found that the studies on which Maddox purported to rely did not examine mesothelioma risk according to fiber type as they could not “identify those subjects whose exposure was only to chrysotile.” *Id.*

The court of appeals also dismissed plaintiff's contention that the theory was “generally accepted” because courts in Georgia and elsewhere had implicitly or explicitly endorsed it in other asbestos cases. As the court noted, other jurisdictions have also rejected it, including in Texas. *Id.* at *5. Moreover, the court granted broad discretion to the trial court to put greater weight on the testability-related Daubert factors in determining the admissibility of scientific testimony. *Id.*

Finally, the court of appeals held that the trial court was justified in applying the Daubert factors rigorously, particularly with respect to testability, given that Maddox had displayed qualities of a “quintessential expert for hire.” These included the submission of an affidavit purporting to analyze the case facts and to provide scientific support for his conclusions regarding exposures to Union Carbide products only after he had been challenged. *Id.* at *5.

As the trial court held, citing *Clair v. Burlington Northern R. Co.* 29 F.3d 499, 503 (9th Cir. 1994): Scientists whose conviction about the ultimate conclusion of their research is so firm that they are willing to aver under oath that it is correct prior to performing the necessary validating tests could be viewed as lacking the objectivity that is the hallmark of the scientific method.” *Butler*, at *11.

The *Butler* appellate decision continues a string of authority around the United States requiring experts

in asbestos cases to perform product-specific exposure analyses linked to scientific evidence demonstrating the exposure levels that cause disease to support the claim that a particular exposure contributed to causing a plaintiff's mesothelioma. Indeed, such a basic analysis is required in virtually every other type of toxic tort case other than asbestos.

Plaintiffs, however, have been relying for years on the "each and every exposure" theory to sidestep these requirements in asbestos cases, often without meaningful scrutiny from courts coping with the "elephantine mass" of asbestos cases. Butler furthers a trend toward scrutinizing causation evidence in asbestos cases and ending the special asbestos-only rules that help drive that elephantine mass of litigation.

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Woods represented Union Carbide in the Butler matter and conducted the Daubert hearing for Union Carbide at the trial court level. Jim Grant of Alston & Bird LLP represented Union Carbide before the Georgia Court of Appeals and conducted oral argument. He was assisted by Lawrie Demorest and Allison Thompson, also with Alston & Bird. Woods, along with Herbert Zarov and Michael Olsen of Mayer Brown, also assisted on the brief.

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