



## Alerts

### Pennsylvania Supreme Court to Address Admissibility of Scientific Testimony in Toxic Tort Cases

June 30, 2011

*Toxic Tort Alert*

The state appellate court in Pennsylvania recently made a bizarre ruling that allows dubious scientific claims to be admitted at trial as evidence. *Betz v. Pneumo Abex, LLC*, 998 A. 2d 962 (2010). The trial court had excluded scientific testimony which declared that asbestos causes mesothelioma for *any* plaintiff with *any level* of occupational exposure to asbestos. The trial court found the expert's logical leap from "total cumulative exposure to asbestos causes mesothelioma" to "any exposure to asbestos causes mesothelioma" to be inadmissible under the Frye evidentiary framework. See *Frye v. U.S.*, 293 F. 1013 (D.C. Cir. 1923). The appellate court forcefully disagreed and reversed.

In *Betz*, plaintiff, the estate of a man who worked as an auto mechanic for 44 years, sued defendants, various parties that manufactured car brake-pads. The estate alleged that the asbestos emitted from the brake-pads caused the decedent's mesothelioma. The manufacturers filed a *Frye* motion to exclude the estate's scientific evidence discussing the cause of the decedent's mesothelioma. They argued that epidemiology studies demonstrate no causal link between asbestos and mesothelioma and that epidemiology is a more reliable methodology than the estate's "case study" methodology. According to the manufacturers, the superior reliability of epidemiology ought to preclude presentation of other methodologies. The trial court reviewed this motion under the *Frye* standard, which instructs that a novel scientific theory can only be introduced at trial if the methodology is generally accepted in the relevant scientific community.

During a hearing on the *Frye* motion, the estate's expert admitted that he was not familiar with the decedent's exposure to asbestos, but that nonetheless he "would offer a favorable opinion regarding causation for any plaintiff with any level of occupational exposure to asbestos." The expert based this expansive claim on what he called a "bridge" methodology, which is essentially inductive reasoning. He opined that: (1) chrysotile fibers are carcinogenic; (2) chrysotile fibers are found in brake-pad products; (3) the product releases chrysotile; (4) people develop tumors; therefore, any exposure to asbestos results in mesothelioma. The trial court found that this conclusion does not follow from the premises. Specifically, the trial court declared it contrary to common sense and a "fallacy" to argue that because a large amount of exposure to a substance can be harmful a small amount can also be harmful. Consequently, the trial court found the expert's opinion to be novel and his methodology to be not generally

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accepted in the relevant scientific community.

The appellate court held it improper for the trial court to rely on “common sense” rather than the manufacturers’ arguments or testimony from expert witnesses. The appellate court further held that Pennsylvania precedent allows scientific experts to extrapolate and therefore that the expert’s methodology passed the *Frye* test. The appellate court looked to *Trach v. Fellin*, 817 A.2d 1102, 1104 (Pa. Super. 2003) (*en banc*), in which an expert relied on evidence that a small dosage of a particular drug could be harmful and “extrapolated up” to conclude that an overdose could cause serious problems. The appellate court in *Betz* chose not to make a distinction between “extrapolating up” and “extrapolating down.” To extrapolate up, the expert knows a certain minimum level of the substance is harmful and presumes that more of the substance will cause more harm. To extrapolate down, the expert presumes that if a large quantity of a substance is harmful then a small amount will also be harmful. “Extrapolating down” requires one to disregard the notion of a “threshold amount” below which exposure is not harmful and instead assume that even *de minimis* exposure to the substance is harmful. Using the “extrapolating down” method, the expert concluded that any exposure to asbestos causes mesothelioma, without providing any data supporting this extreme position. The appellate court ultimately found that the expert’s approach was generally accepted in the scientific community and therefore his testimony should be admitted at trial.

The appellate court’s ruling in *Betz* will be reviewed by the Pennsylvania Supreme Court later this year. As it stands, the decision threatens to vitiate the distinction between general and specific causation in asbestos disease cases and thus substantially lightens the burden of proof for plaintiffs. Without a Supreme Court ruling holding plaintiffs to their burden and refusing to over-simplify the pathology of mesothelioma, defendants in toxic tort cases fear that juries will be asked to evaluate dangerously unsubstantiated claims.

For more information, please contact [Craig T. Liljestrand](#) or your regular [Hinshaw attorney](#).

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