

Expert's Specific Causation Methodology Unreliable in Leukemia Row

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In a case underscoring the importance of reliable methodologies in expert testimony, the U.S. Court of Appeals for the *First Circuit* upheld a trial court decision excluding specific causation testimony linking benzene exposure and *acute promyelocytic leukemia* (“APL”) because the expert could not properly support her conclusions. See [*Milward v. Rust-Oleum Corp.*](#), No. 13-2132, 2016 WL 1622620 (1st Cir. Apr. 25, 2016).

Plaintiff alleged he was exposed to benzene from Defendant’s products during his work as a pipefitter and refrigerator technician, and that such exposures caused his APL. To support this contention, Plaintiff relied on the testimony of Dr. Sheila Butler, a physician specializing in occupational chemical exposures. The trial court found Dr. Butler’s methodologies unreliable and excluded her causation testimony under Rule 702. With Plaintiff unable to show specific causation, the trial court granted a defense motion for summary judgment.

On appeal, Plaintiff challenged the trial court’s treatment of Dr. Butler’s relative risk analysis and differential diagnosis, and the First Circuit upheld the trial court’s decision. In her relative risk analysis, Dr. Butler compared Plaintiff’s benzene exposure levels to those that had been found to be dangerous in other studies. The Court found, however, that Dr. Butler had not accounted for studies that conflicted with her opinion, nor could she explain why she chose the studies she chose. Dr. Butler’s “complete unwillingness to engage with the conflicting studies (irrespective of whether she was able to or not) made it impossible for the district court to ensure that her opinion was actually based on scientifically reliable evidence” *Id.* at *13. The First Circuit found this lack of reliability justified the trial court’s exclusion of her testimony.

The First Circuit also found Dr. Butler’s differential diagnosis unreliable. Dr. Butler ruled out all other causal factors associated with APL, including smoking, obesity, and idiopathic diagnosis (*i.e.* a diagnosis with no known cause). The Court noted that Dr. Butler only “ruled out” idiopathic causes because she “ruled in” benzene as a cause of Plaintiff’s APL. The Court found that because the record did not contain a scientifically reliable basis to “rule in” benzene, Dr. Butler’s dismissal of

idiopathic causes was also unreliable. Therefore, while differential diagnosis can be a reliable methodology for showing specific causation, the First Circuit held that it was not reliably employed and upheld the trial court's decision excluding Dr. Butler's specific causation testimony.

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